Design Aesthetics

Theoretical Basics and Studies in Implication

Mads Nygaard Folkmann

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To my family—Lea, Ane, and Lone

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Preface

This book's ambition is to advance the understanding of what design is and means as part of the modern world. Underlying the academic pursuit is my deep personal interest in understanding what the "world" is for us and the specific ways, in the here and now, that we are part of and at the same time contribute to shaping this world. This is, for me, why design is so important and interesting to investigate.

In the last 30 years, design has become a highly reflected concept for human creation, and it has increasingly been put to cultural, societal, economic, and political agendas. The range and variety of what design covers in products, graphics, digital interfaces, service solutions, systems, and social design have created whole cultures of design as a noncircumventable condition for human lives. Thus, design is getting ever more important and omnipresent in today's societies, and reversely, they are difficult to imagine without design.

Because of the process of modernization, design has changed the face and character of our material surroundings and, accordingly, the experiential setting for our being in the world. In this way, design has gained in impact quantitatively by being everywhere and qualitatively by the ways it enters and conditions human lives. On this point, a special interest for me is how the advent of digital technology has changed what design is, and how it appears, when it is anchored in objects but turns "post-material."

As a product of human creation, design produces an artificial interface for meeting the world. On this basis, the argument of the book is twofold.

First, design should be interpreted in the context of phenomenological reflection as it frames our experiential engagement with the world. Design may not be identical with the world (rather, it is only a part of the world),

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but it creates access to what we understand as "world." As pointed out by philosopher Wolfgang Welsch (2020), what is perceived as real is "no longer a privilege of reality but has been absorbed by media and design" (129). Thus, the phenomenological argument is that design frames human experience.

Next, aesthetics provides concepts for reflecting how this framing of experience takes place. On this point, I propose to differentiate between sensual, conceptual, and contextual dimensions of aesthetics in articulating what is specific for an aesthetics of design or, more specifically, for what I will label "design aesthetics." Along sensual, conceptual, and contextual dimensions of design aesthetics, this book investigates how design stages and focuses "experience" and how this is negotiated in design practice, through design objects, and in consumer perception.

The book unfolds design aesthetics in its theory and practical implication and presents itself as a contribution to aesthetic theory. It is, however, even more so an attempt to engage in a discussion on design as a phenomenon setting the scene for our being in the modern world. On this point, the book implicitly addresses the question of what makes design special and how it has changed in history. Thus, on the one hand, to enter an aesthetic reflection entails general reflections of sensory experience and the coding of objects. On the other hand, design has always been a child of its time and embedded in historical and cultural contextualization. The book takes a material starting point in looking at physical objects—in this way, the reader will meet several lamps and portable loudspeakers—and a next step beyond this book could be to investigate other manifestations of design in the light of aesthetics.

My previous book for the MIT Press, *The Aesthetics of Imagination in Design* (Folkmann 2013), also dealt with aesthetics, but as a starting point for a more narrowly focused study on the role of imagination for design. Even though chapters in the two books are related, and chapter 3 in this book builds on insights of chapter 3 from the previous book, the focus now is broadening the scope of what aesthetics is and means for design. In the 2013 book, aesthetics is a vehicle for an investigation of the dynamics and processes of imagination; in this book, it is the main subject. The fact that a lot has been going on in the last 15 years in defining and exploring the aesthetics of design requires a revised look at the topic.

The book is influenced mostly by discussions in the fields of aesthetic theory and cultural studies in design. In recent years, design has increasingly

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become an object for aesthetic reflection, and philosophers and design researchers alike have contributed to the discussion (see chapter 2). Building on this, my own contribution is to consider the aesthetics of design within the cultural context of design. Being affiliated with a humanities university department having design studies and design history as its core disciplines, this has been my disciplinary starting point in the endeavor to understand the aesthetics of design and to make cultural studies in design and aesthetic theory meet and cross-fertilize.

The book has a bias in cases and collaborations of a Danish provenience; being located at the University of Southern Denmark in Kolding, the Design School Kolding is a direct neighbor for sharing interests and collaborations. The book should, however, not be read as a book on Danish design or on the aesthetics of Danish design. Through the generality of concepts, I encourage readers to transfer the analytical optics to their own contexts of design.

Just as the book draws on and integrates sources from different disciplines, it draws on sources in different languages, especially German, where a kind of explosion in theoretical discourse on design has taken place in recent years. Unless explicitly noted in the text, all translations from non-English sources are mine.

The book has been in progress for several years, and parts of it have appeared in conference papers and journal articles. Different research communities have helped shaping this book. Philosophers of aesthetics, notably Jane Forsey, Carsten Friberg, and the participants at the series of philosophical seminars in Ascea, Italy, contributed to conceptual discussions. The Danish network for aesthetics, Aesthetics Unlimited, set the scene for invaluable seminars and visits, and I thank Anne Elisabeth Sejten for her generosity. I have profited from discussions and seminars at the Design Research Lab in Berlin, Germany. Fátima Pombo, Kjetil Fallan, Grace Lees-Maffei, and Nic Maffei have—as part of the international research community in design studies and design history—influenced the process and helped me frame the project. Danish design researchers Vibeke Riisberg and Anne Louise Bang from Design School Kolding provided valuable insight into the world of designers; Riisberg read parts of the manuscript as well. Tom Bieling of Hochschule für Gestaltung Offenbach, Germany, has been a highly inspiring dialogue partner. Editorial staff at the MIT Press were invaluable in bringing the book to fruition, especially Doug Sery for his

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I am indebted to the Carlberg Foundation for generously funding my work on the book and also helping me through finalizing the manuscript during the dark times of the COVID-19 pandemic and, at moments, veiled consciousness.

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Introduction

To deal with design aesthetics is to contest the relevance of design for human life. From light switches and smartphones to simple items such as plates and cutlery, design frames everyday experiences and practices and constitutes the world we live in. The basic claim of this book is that aesthetics gives a central entry to understanding what design is, how design works, and how design frames and conditions human experience.

My initial assumption is that design is getting ever more important as a factor of the modern world in its many forms as material objects, graphics, interfaces, spaces, services, and mediated representations. Being ubiquitous, design sets the scene for human lives through the material objects that surround us, through the devices we use to communicate and organize information, and in the systems and structures that guide our behavior and ways of interpreting and gaining knowledge about the world. Design needs to be taken seriously as a medium, material and immaterial, visible and invisible, for meeting the world. Good or bad design can affect people on a large scale.

My core argument is that *aesthetics* provides a productive way to investigate how design frames experience. As a methodological tool, aesthetics offers concepts for investigating and understanding how design is constituted, how it appeals to and affects people, and how it sets frames for human experiencing. Concepts in aesthetics describe how design appeals to us and is experienced through the design's immediate tangible elements (e.g., form, material, color, and texture) and dimensions of functionality and use (e.g., in interaction). Further, aesthetics also relates to conceptual and contextual aspects of design.

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Means of Experience

The two different drinking glasses on the cover of this book may serve as an initial illustration. In general, drinking glasses are the means of the everyday practice of handling and drinking liquids. At a microlevel of experience, thus, the manifold of drinking glasses in, for instance, appearance, size, and weight provides a variety of possible sensual and conceptual interactions. The ribbed glass from the Finnish company Iittala is an example of an industrially manufactured product that contrasts with more neutral glasses; it has a distinct appearance, builds on historical heritage by being in continuous production since 1932, and carries the name of the designer Aino Aalto. In contrast, the irregular, organically shaped, mouth-blown glass by the Danish designer Anders Raad exemplifies an experimental, uniquely crafted product that hereby bears the mark of its designer. What they have in common is that both glasses may attract attention to themselves. Whereas much design operates as silent, anonymous, non-noticeable vehicles for a purpose, this is a type of glass that through its design, is intended to stand out and be noticed.

First, the Iittala glass may offer a sensual experience of drinking where visual perception of form and color of the glass is in the foreground (and the glass is available in five colors and a clear version), perhaps evoking expectations of what it is like to drink from this glass or just appreciating the reflection of light in the glass. Next, tactile sensations—touching the rhythmic, regularly ribbed surface of the glass with one's hands and mouth—contribute to an enhanced sensual engagement. Hereby, the glass frames the experience of drinking by offering a sensual process of drinking that also attracts attention to the means of drinking, the glass, itself. Yet another enhanced experience may be offered by the organically shaped glass. Because all glasses in this series are mouth-blown and thus unique by intention, they also, as a type, offer an experience of a high degree of variety. When turned, the organically shaped glass reflects the light in ever-new ways. Because it is made of leftover glass from the production, Anders Raad never knows which color it will turn out to be (except that because of the oven temperature of 1,100 degrees Celsius, it will be in a blue-green range since these are the only colors to endure this temperature). The glass offers micro-sensations of touching all the folds and varieties of the surface; and it may encourage a conceptual reflection of why it is made so, which in

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the view of the designer has to do with exploring new possibilities of glass production and recycling materials.

In the scope of this book, aesthetics relates to phenomenological concepts of how experience is enabled and structured as well as to cultural notions of what design is as a part of the modern world. In this way, as illustrated by the glass example, the aesthetics of design cannot be reduced to the visual, contemplative engagement with objects at a distance and perceived isolated from their contextual setting, which is a part of the Western art tradition and still can be found in design museums. Admittedly, this tradition may contribute to pointing at some aesthetic potential in the displayed objects; the cover image of glasses may serve as an example of how design objects can be displayed with the focus on appearance rather than use.

Instead, the phenomenological starting point brings us in close interaction with the objects and the contexts they are a part of and requires a reflection on how the design objects through form, potential for use and interaction, and meaning content provide access to and an experience of the world.

Obviously, design is not just aesthetic; it also concerns, for instance, social, political, and ethical issues, the question of sustainability, and the consideration of process. Still, the aesthetic aspect of design is always present to some degree as the way design appeals to and communicates with us in its sensual appearance. In this way, I will privilege aesthetics as an entry to understanding design, even if I will not claim it to be a comprehensible term for all aspects of design. I will claim, however, that all design has an aesthetic dimension as it relates to us and our understanding the contemporary importance of design.

The Focus on Design

The starting point for my study of design aesthetics is an interest in the material culture of everyday life and how design shapes it. Design can be said to be a *Leitmedium* of modernity, in the sense that it is an overall medium for modern cultures and creates meaning in an intersubjectively binding way (cf. Hörisch 2009). Design is the unavoidable access point for our perception and understanding of the world in its cultural formations. Art may have been a driver of cultural development until the end of the nineteenth century, at least in a Western context; in the twentieth and

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twenty-first centuries, design is globally at the cultural as well as technological forefront. As mentioned by design culture researchers Guy Julier and Anders V. Munch (2019) in a statement underlining our entanglement in the designed world: "We can skip art exhibitions, avoid television and digital media, ignore advertisements and act contrarily to the schemes of architecture and planning. But design relentlessly intervenes into the quotidian world so that it becomes our world and we become in it" (5).[1]

Vital for my argument, I will stress the importance of the *material* aspect of the objects of everyday life. Design gives material texture and structure to our physical surroundings in everything from utensils, furniture, smartphones, computers, and books to transportation vehicles and systems, houses and urban environments, and shopping malls and infrastructures. In terms of design, the experiential meeting with the world is, though, not just given through three-dimensional material objects but also through graphics, digital-interactive surfaces, and designs conceptually conceived as solutions at a societal level or the level of a service. I will, however, primarily pursue the physical materiality of design and foremost focus on material objects and less on processes and methods of planning and thinking, which have been included in the concept of design for the last 30 years.[2] I will, though, argue for the advantages of taking a material starting point because this provides focus for the discussions of what aesthetics in design is, since most existing aesthetic theories often relate to concrete artifacts. In this way, my approach will more easily connect to previous theoretical discussions. But, importantly, the material focus may take the interest in many directions. In my view, a material starting point makes it possible to explore how design has changed and now affects our lives in ways that were unimaginable only few years ago.

Especially with the development of digital technology, the materiality of design has changed. Of course, developments in technology have always influenced design and changed its materiality; just think of how the development of light sources such as the halogen light bulb and light-emitting diodes has influenced lamp design and "offered greater freedom of experiment in dematerialized form" (Aynsley 2009, 191). But digital technology has not only affected the form of the objects but also the core of their being as design objects. Objects with embedded digital technology have increasingly gained more function while being miniaturized, and on-screen interactivity has gained immensely in importance through the digital interfaces

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everywhere. But even if materiality has changed, it has not disappeared. Even seemingly immaterial service design solutions also need material touch points.

Further, understanding the change of the material provides an entrance into understanding the changes happening at the larger scale of culture, economics, and politics, which, reversely, operate as a contextual framing for the material objects. In times of platform capitalism, blockchain technologies, and ubiquitous mobile computing, we are facing a "digital culture" (Stalder 2016) where cultural, economic, and political processes of creating and exchanging meaning, establishing communities, and organizing knowledge have taken on new forms. In my approach, the focus on the material objects and their aesthetics will be a way to focus an analysis of contemporary digital culture and how digital technology severely changes modern living conditions. Climate change is another transformative condition for how we conceive of design and its role in society, where design has taken and, in the future, may take the double role of being both the problem, as a driver of unnecessary consumption leading to waste production and immense emission of carbon dioxide (CO2), and a possible solution whose character we still need to see. "The Ecological Turn" in design is still awaiting to be achieved.[3] Although beyond the scope of this book, it is an arena for design aesthetics to enter to reflect how sustainability can be gained and experienced through design.

Ultimately, the aim of the book is to acknowledge the omnipresence of design in the modern world and to examine how design appeals to us. On this point, design may appear for us in a double way—not only as omnipresent in the objects of everyday life but also as something with a special mark of being "design." Design historian Penny Sparke (2013) calls this the Janus face of design: being a "*silent quality of all mass-produced goods*" while also being "*a named concept within the mass media*" (2, her italics). Design is ordinary *and* special at the same time. Accordingly, it is experienced habitually in proximity *and* perceived in reflective distance. Likewise, the aesthetics of design balances between these two facets of design. On the one hand, it operates as a general feature of all design—that is, how it creates sensual appeal and is organized in "sensescapes," a term used by cultural theorist Ben Highmore (2009). On the other hand, the aesthetics of design opens an appreciation of special qualities and appearances of design—for instance, when design objects are designed to call for attention. Being closely affiliated

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with industrial production, design appeals to consumption though seductive surfaces, critically investigated in the 1970s as the aesthetics of the commodity (Haug 2009), and is hereby permeated by flows of economies and financialization (Julier 2017).

More precisely, this double structure of design as silently omnipresent and as object for conscious attention is a special feature of design aesthetics. Often, design solutions oscillate between these two positions of background and foreground, of the ordinary and the special.[4] On the one hand, in breaking with the habitual, design may let us experience everyday life in new and often refracted or reflected ways. The organically shaped glass can be seen as such an object offering a new sensation and reflection of a mundane praxis. On the other hand, design is mundane, familiar, and a part of the texture of everyday life. Experiencing design may require a "special sensibility" (Drügh 2015, 132) when we perceive something so close and immediate to us that we do not notice it as special or do not notice it at all.

On the basis of this complexity, the purpose of the book is to understand the different modalities of the aesthetics of design: how design is a part of the modern world and how aesthetics may play different roles in the creation, circulation, and consumption of the artificial world of design. The critical project is not just to enlighten how design can be aesthetically effectful—for instance, in being "pleasant," which is the focus in some mostly practice-oriented theories on the aesthetics of design—but to enable a reflection of the power of design in contemporary life, for good and for bad.

The Scope of Aesthetics in Design

To take aesthetics as a starting point for dealing with design may not be entirely uncontroversial. In 2013, the German design research journal *Öffnungszeiten. Papiere zu Designwissenschaft* asked whether "the old question" of aesthetics still might be relevant in the "seemingly easy-going-ness and superficial-ness of a globalized culture" (Romero-Tejedor 2013, 3). The answer, however, was affirmative, in the sense that we need to be critical of the different kinds of aesthetics in play and with relevance for design (cf. Allesch 2013).

In this vein, over several years (2014, 2016, 2018) conferences of the International Committee for Design History and Design Studies have proposed strands on design aesthetics in order to investigate how it contributes

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to "*transforming ways of living and constructing new paradigms*" (Calvera 2018, 538, her italics), an important and difficult task. In 2020, the aesthetics of design was foregrounded in a conference "Ästhetik des Designs: Philosophische Perspektiven," organized by the growing humanistic design research community in Germany, which questioned how design as a "descendant of industrialization," on the one hand, and a "pupil of the liberal arts," on the other, can be seen as inhabiting its own form of aesthetics beyond the dichotomy of commercial "styling" and artistic "autonomy" (Feige, Arnold, and Wildt 2020). Starting from a point in philosophy, the question was not only what aesthetics of design might be, but also, vice versa, how basic concepts in aesthetics might be challenged by design and would need to be reconceptualized.

Even so, "aesthetics" may be a difficult term with many meanings and implications in different discourses—for example, in philosophy, psychology, and studies in media and the arts—and with emphasis on evaluative judgments, qualities of sensual perception, or special features of material objects. In the Western context, aesthetics has a long tradition for focusing on art and beauty and for being evaluative and judgmental, but beyond this, aesthetics deals broadly with the question of a sensual engagement with the world. Thus, to scrutinize the aesthetics of design is to look beyond the aesthetic paradigm of art but nevertheless still acknowledge this heritage.

Views on Aesthetics

To begin with, aesthetics is part of a popular discourse on design because so much of design in, for instance, lifestyle contexts is noticed and appreciated for its aesthetic surface qualities rather than the functional abilities to solve problems or meet practical needs. In popular culture and the discourse on design among manufacturers, designers, and consumers, the word "aesthetics" is often applied to the specific qualities of designed objects, often with a positive valorization. A part of the growing public interest in design is an interest in the aesthetic qualities of objects, and designers often testify to be interested in what aesthetics means in relation to design.

But whereas design objects have been acknowledged for their aesthetic qualities in the context of everyday consumption, several academic disciplines have taken critical stances against aesthetics, often because of the perception that it is superficial. In the context of German critical theory, Wolfgang Fritz Haug (2009) has severely critiqued aesthetic parameters in

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design for seducing consumers through superficial styling. Haug's influential book on the critique of commodity aesthetics, *Kritik der Warenästhetik*, was originally published in 1971 but republished in 2009 with a book-length addition on commodity aesthetics in "high-tech capitalism," without Haug leaving or altering his original intention of critiquing the seductive means of capitalism.[5] The concept of commodity aesthetics has, however, also been rearticulated in an open and unbiased exploration of the role of aesthetics means for communicating goods and, on the behalf of consumers, for interpreting the contribution of goods to identity construction (Drügh 2011; Drügh, Metz, and Weyand 2011; Baßler and Drügh 2019).

With a quite different argumentation, design history has, since its formulation as an independent discipline in the 1970s, taken a critical stance on aesthetics as a concept with relevance to a historical understanding of design. Privileging analysis of cultural, social, economic, and political contexts for design and attempting to avoid being labeled as a "form of pseudo art history" (Miller 1987, 142), design history has dismissed aesthetics as, variously, affiliated with art history and with superficial stylistic changes of form without a connection to context (cf. Lees-Maffei 2014a).

Nevertheless, the focus on aesthetics may create a link to one of the main constitutive factors of design in a historical perspective: namely, art (just think of the Arts and Crafts movement or the Bauhaus). Much of aesthetic theory, especially of philosophical provenience, primarily has dealt with art. I will acknowledge this connection but at the same time set the aesthetics of design free from the fixed affiliation to art and examine it on its own terms. On these terms, the ambition of the book is not to present a discussion of art versus design at length, which has occupied philosophers conceptualizing the aesthetics of design (e.g., Forsey 2013a; Feige 2018; Siegmund 2020), but to discuss the aesthetics of design as something specific *beyond* the aesthetics of art.

Why Aesthetics?

In either case, we may pose the question why aesthetics in design is relevant to take under consideration today. Do aesthetic concerns have any role to play in the present turmoil in the world, where climate change, pandemics, increasing inequality (on local and global scales), and devastating wars like the war in Ukraine are leading to economic and social instability,

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destabilizing the world as we know it? Is aesthetics not just something "extra" to have in times of affluence and peace when basic needs are fulfilled?[6]

On this point, the question is not only about the role of design aesthetics but also the role of design in general. In contemporary design discourse, political, societal, and social questions are increasingly on the agenda. Sustainability, globalization, welfare, and health issues are often positioned as pressing themes for design, often with the premise that design may provide new paths or new solutions for a better future.[7] In this vein, a tendency within contemporary design discourse is to propose macro-level schemes or visions of how design can be a means for a more sustainable future. Carried with a sense of urgency, examples of proposals are, how we can "design our way out" of the current problems (Thackara 2005, 1); how design can be turned into a diverse "pluriversal" activity with a "radical and constructive" imagination attuned to the needs of the Earth as well as local of communities (Escobar 2018, 7); or how design in changing from being human-centered to being planet-centered in the age of the Anthropocene (proposed to describe a geological age of dominating human impact) can offer "new methods and mindset to handle the giant-scale complexity of the climate and environmental crisis" (Engholm 2023, cover).[8]

This kind of critical engagement and ambition to create a better world through design is deeply integrated in design discourse as it is part of the heritage of modern progressive-optimist design at the beginning of the twentieth century.[9] But, as critically stated by design historian Kjetil Fallan (2022), the history of design is, "perhaps more than anything, a history of waste and wastefulness, of unsustainability," contrasting the "usual gospel of design as a beneficial force" (10). Exactly the complexities and paradoxes of design's engagement with sustainability is what Fallan pinpoints in his investigation of the moment in the 1960s and 1970s when design lost its innocence and status as a tool for progressive modernism by becoming complicit in unsustainable production and consumption. Today, waste is being produced in a previously unimaginable scale and, following the technological development, has ever new forms.[10] Thus, a central aspect of design is to partake in a commercial circuit of production and consumption where people create meaning by engaging with the things they handle, act through, and are surrounded by. Being the "spirit of modern consumerism" (cf. Campbell 1987), the desire for the "new" is a strong force embedded

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in modern subjectivity. As a driver for exploring and inventing the "new," design may be caught in an inescapable catch-22 of nurturing endless desires while claiming to be doing good.

In the context of the dream of design as a globalized problem-solver, in any case, aesthetics may seem to play only a minor role as "beautiful appearance" (Joost 2012, 60) and to be a vehicle for increased consumption and identity affirmation among consumers, leading the world in the wrong direction. In my approach to aesthetics, however, the ambition is not to focus on the "appearance" as necessarily "beautiful" or, in a positive valorization, to evoke emotions of pleasure to be embedded in the experience economy of affluent societies. Instead, I start with a phenomenological interest in how design by different means creates frames and conditions for experience and how design objects by various means stand out as special for this framing of experiencing. Thus, having a near-view perspective on object design, my ambition is not to look futuristically at how things could be (better) on a large scale but at actual effects of everyday objects. Despite the pressing challenges of the planet, everyday objects are still present entities for human experiencing.

Hereby, aesthetic concerns lead by no means to a focus on design as superficial (but maybe to an interest in the surface and the appearance of design) but relate to ethical questions of "how we live through [design's] creation of our material, and, increasingly, our immaterial or virtual environment" (Parsons, 2016, 129).[11] Expressed in another way: As aesthetics deals with value, it will always also be ethical (Findeli 1994). As a discipline characterizing "our presence in the world, how we are affected by the environment and how we on that background act in the world," to employ the words of philosopher Carsten Friberg (2019, 43), aesthetics gives way for a reflection of how we perceive, sense, and are present in the world—that is, how we relate to our surroundings. Conversely, aesthetics enables a consideration of how the surroundings frame our being and understanding of the world when, for instance, seemingly value-neutral designs such as pictograms assert stereotypies of gender differences or modes of preferred actions.[12]

Therefore, aesthetics in my view is not to be understood honorifically, as an appraisal of certain objects incorporating specific qualities that encourage positive responses of pleasure or enjoyment, or identified with beauty; rather, it is a way of investigating how design objects, in positive as well as negative manners, appeal to and frame experience embedded in formative

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contexts of power, economics, and ethics. Thus, my starting point is what I could call the *experientially effective qualities* of design objects.

In dealing with design, further, I distance my approach to aesthetics from the idea of disinterestedness, a part of the heritage from Kantian aesthetics of the eighteenth century and a signum for a distanced perception of the objects to be aesthetically evaluated. Aesthetic experience in design, however, needs to be conceptualized in relation to direct interaction with objects by proximal senses, stressing the element of the sensual engagement by subjects and the sensual appeal of objects. Furthermore, a continued insistence on disinterestedness as a hallmark of aesthetics would result in the marginalization of aesthetics as an isolated domain of special experiences to be entered only at special occasions. Models for this are the phenomenon of *l'art pour l'art* (art for art's sake) and the museum. Instead, aesthetics in design is pervasive and, indeed, omnipresent through the sensual interfaces through which we meet the world: in the designed frames for unfolding everyday life.

In terms of experience, aesthetic theories often point to aesthetic experience as *special* experiences. Either the special kind of human experience is in focus, such as in John Dewey's (2005, 37) notion of "having *an* experience" of fulfillment, unity, and self-sufficiency (which for Dewey is also an experience per se) in opposition to everyday, routine experiences. Or the focus is on experiences encouraged by certain object qualities when the design object stands out as special in some way and attracts attention—for instance, in the way that Martin Daniel Feige (2018, 63) states that design is about "special artefacts that require a special attention in use." It is therefore important to discuss the location of the aesthetic meaning of things in the relationship between subjects having experiences and objects asking to be experienced as special. Furthermore, what can be experienced aesthetically in the objects is being debated in the literature. Typically, theories with an origin in traditional art-oriented approaches to aesthetics suggest a focus on form and effect in terms of beauty (e.g., Pye 1978), whereas recent approaches in analytical aesthetic philosophy point to the functional as a point of departure for aesthetic appreciation (e.g., Forsey 2013a).

Important, as well, is to discuss if design can be aesthetic *only if* it requires attention, such as Feige claims. Much of the design that surrounds us is not being noticed as design in this sense. But as philosopher Glenn Parsons (2016, 20) points out, much design that has an appearance is not "made to

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provide visual or aesthetics pleasure," such as engine parts; vice versa, not all design has an appearance but remains hidden, such as the inner parts of an object or, to use Parsons's example, electrical wiring inside walls. My claim is that all design has an appearance that creates framings of experience related to visual perception as well as tactile interaction in use. In this sense, aesthetic appeal is always in play, even though not always called "aesthetic" by a label or with a high intensity in experience, as implied by Dewey's concept of "having *an* experience," but in a less intense, omnipresent way.

Thus, in the course of the book, "appearance" will evolve as an important concept that not only scratches the surface of design but in its phenomenological application goes deeper.[13] In this vein, philosopher Gernot Böhme (2019) stresses the importance of design because the "aesthetic shaping of the human environment" through design embraces "the wholeness of the human environment, not just as such, but in every detail" (181). Hereby, the implication is that an aesthetics of design always is an aesthetics of immanence, being about the world that we have, perhaps seeing it in a different way, and not being about some otherworldly reality.

Consequently, my argument is that aesthetics is productive as a concept to analyze design at phenomenological, cultural, and societal levels:

- *Aesthetics as an entry to look at design's framing of experience*: On a larger scale, aesthetics deals with design's presence in the world as offering itself to human experience. As clearly stated by Ben Highmore (2011, 37): "Aesthetic theory, perhaps more so than any other arena of theoretical writing, is concerned with experience." Aesthetics deals with "what presents itself to sensory experience," to use the words of French philosopher Jacques Rancière (2004, 13). In this view, and in Rancière's conception, aesthetics always relates to experience but is always also a matter of politics and power because access to what presents itself to experience is always framed by some actors or interests. To illustrate, the company Iittala, manufacturing the ribbed Aino Aalto glass on the cover of the book, is an actor producing its products as important in relation to what can be sensed and perceived as aesthetically relevant. In the case of the Aino Aalto glass, this aspect comes to expression in a high focus on visual and tactile appeal. In addition, aesthetics proposes an entry to conceptualize what experience is and, in the phrase of Colombian philosopher Augusto Solórzano (2018, 553), to "put the meaning of experience (in a worldly context) into play."

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- *Aesthetics as the communicative potential of design objects*: In a closer focus on the objects of design, aesthetic concepts may allow reflections on the relation of function and form, the idea content of the design, and the potential of the objects to encourage reflection. Looking at, say, the mouth-blown glass featured on the cover, we can analyze how it through its curves and organic appearance presents itself to our experience. As a slightly intriguing design object, the glass may evoke wonder (but hardly astonishment) about its form and the intention of the designer. The organically shaped glass can be seen as a conceptual statement about sustainability, as it is made of recycled glass and deliberately varies in color and expression to break the norm of endlessly industrially manufactured glasses.
- *Aesthetics in the cultural context of design objects*: Aesthetic qualities of design objects are not given "in" the objects as an inherent essence but culturally produced in the process of aestheticization. They are being aestheticized, as discussed in chapters 3 and 7. To experience something aesthetically is itself an act of cultural meaning production where a specific mode of seeing and evaluating things is being required. Further, factors surrounding the objects, such as manufacturers, media, and institutions (e.g., museums) may also culturally produce the design objects as objects for specific experiences. By being part of the MoMA (Museum of Modern Art, New York) collection, probably the world's most prestigious art collection of design, Iittala products obtain value as objects worth attention. And the cover photo of the two different glasses, taken specifically for this book, highlights the play of light in the glasses and has, accordingly, an effect of steering the viewer's perception towards formal and visual qualities and not, say, a use situation. Just as in many ads and museum displays, the viewer may in this image be encouraged to appreciate and evaluate qualities of appearance as special.

These three levels of—or entries into—analyzing the aesthetics in design complement and relate to each other in such a way that each of them in principle can never stand alone even if the analysis often motivates us to focus on one of them. In the interdependency of the levels, I aim to state one of the central claims of this book: aesthetic qualities in design are not essences to be found in design objects but are specific qualities of design being culturally framed and produced.

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Methodological Approach

In terms of methodology, the book combines approaches in design philosophy with cultural studies in design. In my view, this combination of approaches is necessitated by the topic of aesthetics, which is philosophical as well as cultural, especially (but not only) in relation to design. In its approach, the book is a contribution to the emerging field of philosophy of design with a special regard to a cultural-contextual understanding of design and, at the same time, a contribution to the field of cultural studies in design with a special attention to the question of aesthetics.

Philosophical Perspectives

First, entering a discussion of aesthetics, philosophical discourse is unavoidable. In the aftermath of Kant's seminal *Kritik der Urtheilskraft* (written in 1790), the discipline of philosophical aesthetics has developed around questions about the role and character of aesthetic judgments. From philosophical aesthetics, we gain frameworks for describing central concepts of aesthetics, such as beauty, the ontology of aesthetic objects, and the location of the aesthetic in an interchange of objective reality and subjective response. Further, a philosophical approach to design enables a fundamental questioning of design in terms of epistemology (how design operates as a means for obtaining knowledge of the world), phenomenology (how design conditions experience), and ontology (what design is in this respect), which is vital in order to understand what characterizes design as a phenomenon and *Leitmedium* of the modern world.

In the last 20 years, design has increasingly become a topic for philosophical reflection. Design has gained in interest for philosophers as a phenomenon of thorough reflection on questions of function and use (e.g., Dorschel 2003; Parsons and Carlson 2008; Forsey 2013a), as a phenomenon of the modern world (Vial 2014), or in relation to technology (Verbeek 2005; Vermaas et al. 2009). Recently, comprehensive works (with titles just as comprehensive) have been published: for example, Glenn Parsons's *The Philosophy of Design* (2016); Daniel Martin Feige's *Design. Eine philosophische Analyse* (2018); the 25-chapter-long anthology *Advancements in the Philosophy of Design* (Vermaas and Vial 2018),[14] and the 20-chapter-long anthology *Philosophie des Designs* (Feige, Arnold, and Rautzenberg 2020). In addition, design researchers have testified philosophical interests in questions of the

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epistemological foundation of design and how design is a means to constitute new knowledge (Galle 2008, 2011; see also several of the articles in Vermaas and Vial 2018, e.g., Schneller 2018). In an anthology with the direct relevant title *Designästhetik. Theorie und soziale Praxis* (Ruf and Neuhaus 2020), reflections on the intersection between philosophy and media aesthetics are presented. As a "context dependent and complex process of coding," design is seen to obtain its aesthetic meaning through its "mediating conditions" (12) in media and design practice.[15] What design does, according to coeditor Oliver Ruf (2020), is to produce formats for enabling aesthetic experience and hereby also offer a common space for experience, "einen gemeinsamen Erlebnisraum" (22), for consumers.

In this context, my specific focus is on *design phenomenology* in the question of how design frames human experience.[16] Whereas phenomenology as a philosophical discipline in general deals with the conditions of human experience in relation to what can be experienced, design phenomenology entails a reversal and emphasizes the role of design, in its many types of appearance and its creation of tactile and visual surfaces of the modern world, for affecting and structuring experience. In this instance, design phenomenology partakes in the "material turn" where a "complex scientific narrative" within the humanities and social sciences places the "material and thing-oriented aspect in the foreground of the description of culture and society" (Heibach and Rohde 2015, 14). Partaking in this "material turn" are the actor-network theory, claiming objects to possess active agency in networks with humans—for example, in guiding behavior (cf. Latour 2005)—and material culture studies pointing to the steering role of the "material environment" in the "development of social forms" (Dant 1999, 12). Further, relating directly to phenomenology with application for design, philosopher Peter-Paul Verbeek (2005) employs the concept of "postphenomenology" (initiated by Don Ihde) as a way of acknowledging the role of "things" for mediating "how human beings are present in their world and how the world is present to them" (235). As stated by Prasad Boradkar (2010), humans design things, and things design humans: "People and things configure each other" (4).

In my proposal, aesthetics is relevant for design phenomenology as a conceptualization of *how* design frames experience in cultural and social contexts. On this point, a conceptualization of aesthetics that considers sensual, conceptual, and contextual-cultural dimensions of design in combination

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(cf. chapter 3) is beneficial. In this vein, I will argue that design phenomenology not only deals with the objects as material entities, which may form what the "world" may look like to us, but also with the effect of their meaning content, which needs conceptual processing. That aesthetics takes place as a negotiation of sensual and conceptual meaning points to Kant's original statement of aesthetics (cf. chapter 1) and aligns with a central claim by cultural theorists Moritz Baßler and Heinz Drügh (2021, 131) in their book on contemporary aesthetics that aesthetics contains modes of intensity and distance, "fascinated distance, qualified intensity": the intensity of the perceptually given in a dialogue with and being cross-fertilized by the distance of conceptual reflection leading to fascination.

In intersecting sensual and conceptual, design theorist Tom Bieling (2020, 7) states that "our way of knowing the world and our ways of interpreting are always interlinked with the things that surround us." This is a formulation resonating the phenomenological approaches of Flusser (1993), Burckhardt (2010), and Selle (2007), who all investigate design at the intersection of material presence and "invisible" effects of the "idea" of design in devising action or installing cultural notions.[17] What is important to acknowledge in this approach to design phenomenology is, first, that experience is framed by sensual-material means as well as by conceptual idea contents, and, second, the idea content of the design is not something beyond the design but immanently integrated in the design objects.

To exemplify, the framing of human experience is not only a matter of materially guiding behavior through, for instance, bumps on the road, or cars only being able to drive if the driver's seat belt is fastened (remarkably, a common denominator of these examples from Latour and Verbeek is their origin in traffic), where the question of experience is limited to an immediate bodily or behavioral response to a material presence in the world. Material design objects also affect experience through the kind of conceptual meaning and the cultural possibilities they evoke—for instance, when an electric bike evokes an idea of easy mobility in combination with a cultural notion of an environmentally sustainable way of getting around. An electric bike not only offers a way of structuring behavioral patterns of moving through the traffic, but it also sets the scene for human experiencing through the cultural possibilities and constraints entailed by it. The space of cultural meaning in a material object such as the electric bike relates not only to the ability to be mobile and drive fast but also to cultural notions of

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what speed and mobility are in modern traffic and how the electric bike offers a new mode of being part of the flow. Electric bikes relate to and change the constituents of experience by offering a new way of moving through the traffic *and* a new concept of what movement is, which, ultimately, may feed into larger societal contexts of traffic planning and investments.

Cultural Perspectives

Second, *cultural studies* are required to understand the changed conditions of the production, circulation, and consumption of aesthetic meaning, whether in the form of artworks, design objects, or commercial settings in advertising or retail spaces. Objects and appearances to be aesthetically evaluated are not just "there" but are culturally produced as objects for specific experiences stemming from specific historical conditions.

Within the broad field of cultural-historical studies in design, the focus has been on studying cultural, social, economic, and political contexts for design, especially the relationship between production, design practice, and consumption, whether in a context of cultural studies (Hebdige 1994; du Gay et al. 2013), design culture (Highmore 2009; Julier 2014), or design history (Fallan 2010; Raizman 2010; Sparke 2013). In addition, Kjetil Fallan (2019) has propagated design history, "arguably the most established form of humanistic design studies" (15), as a methodological entry for investigating not only the past but also developments in contemporary society in relation to sustainability and digitalization.[18] Furthermore, material culture studies have close affiliation to the field of design by being interested in the material artifacts within the context of and with a contributing role to culture (Miller 1987; Dant 1999; Attfield 2000; Miller 2010). Being "undisciplined disciplines," to use the term Fallan (2010) uses (at least) about design history and material culture studies, having produced a "large amount of highly diverse research" (35) on methodologically eclectic grounds, the common trait is, however, the focus on cultural analysis and the importance of context in order to understand design.[19]

Aesthetics in design needs, I will argue, to be investigated in relation to cultural contexts of design. Interestingly, however, aesthetics has only played a minor role in these disciplinary approaches. In relation to design history, the concept of aesthetics has, as mentioned, mostly been affiliated with art history. Within the context of design culture, aesthetics has been seen primarily as a mere matter of "taste" in the sociological tradition from

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Bourdieu. An exception, however, is the proposal by Ben Highmore (2009). Conceiving the modern world to be produced as "designed sensescapes" (7), his approach leads to a concept of "social aesthetics," dealing with "the sensual material life of objects, and the subjects that interact with them" (10). Highmore, rightly, claims the importance of the social context for perceiving and apprehending the sensescapes of modern design, while at the same time embedding this in aesthetics as "concerned with material experiences, with the way the sensual world greets the sensorial body and with the affective forces that are generated in such meetings" (10). In this way, Highmore points to the scope of an aesthetic approach to contemporary design culture, where both objects and subjects are in focus: the character of the sensual worlds that meet us and the affective, psychological reactions to those meetings.

By investigating the cultural logics of aesthetics in design and aestheticization in relation to design, this book will offer a contribution and a corrective to the field of cultural studies in design. The book will "do" design philosophy in the sense that aesthetics is theorized to be a central entry to understanding the importance of design as a contemporary cultural phenomenon.

Structure

The book is organized into two sections: a theoretical section and a section with studies in implication. The book presents a coherent argument, but the chapters can be read independently. The chapters in the section on implications do, however, build on insights in the theoretical section. These are, where necessary, recapitulated.

In the first section on *theory*, chapter 1 presents the concept of aesthetics. Chapter 2 reviews central positions relating aesthetics to design. In the introduction to central topics in dealing with design aesthetics, the review is structured by core concepts such as beauty, function, appearance, and pleasure. In chapter 3, I present the book's comprehensive theoretical framework on design aesthetics, differentiating between sensual, conceptual, and contextual aspects of aesthetics. The discussion of culturally contextualizing the aesthetics in design leads to chapter 4 on aesthetic experience in design. Being determinant for what is being regarded, evaluated, and experienced as aesthetic, aesthetic categories get in focus, and the chapter

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offers an analysis of how aesthetic categories have changed in relation to design. The chapter takes a contemporary starting point but looks back on former aesthetic categories.

The second section on *implications* unfolds case studies of design practice, objects, and modes of perception in relation to design aesthetics. Chapter 5 examines aesthetic concerns in the phase before the finalized design object; that is, how designers as a part of their practices work with and consider aesthetics. A central focus in the analysis is the role of the prototype as a means in the design process of negotiating aesthetic concerns. In chapter 6, I employ the concept of "post-material aesthetics" to examine how digital technology is being accessed through design objects and how this affects sensual as well as conceptual aspects of design. A central foundation for the analysis is to establish how the advent of digital technology conditions the cultural circuit of design in new ways. In chapter 7, I examine cultural constructions of aesthetic perception in the arena of consumption: how consumers perceive aesthetically and how perception is aestheticized in different settings to focus on aesthetic aspects of design.

In conclusion, I briefly discuss whether we can have "too much aesthetics." On this point, I argue that we may not be able to solve the problems of the world with design aesthetics (or with design as such), but what we can do is to critically investigate how design constitutes aesthetic interfaces for us to engage with what "world" is to us. As a shortcut to the argument of the whole book, a glossary is included at the end to function as a quick guide to design aesthetics.

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1 Aesthetics

In this chapter, I introduce the concept of aesthetics that serves as a background for the next two chapters on aesthetics and design (chapter 2) and the proposed framework of design aesthetics (chapter 3). Especially in chapter 3, several concepts introduced here will reappear and further unfold.

Aesthetics may be seen as slippery, not only because it deals with complex meeting points of material matter and subjective apprehension and emotion but also because aesthetic theories describe a vast field of many different approaches to experience, art, and design, all deriving from quite different traditions, which often are detached from each other. In this context, I aim to integrate various approaches, but I am, admittedly, influenced by the approach to aesthetics in German philosophy and critical thinking.

As a concept, aesthetics is a child of the eighteenth and nineteenth centuries where philosophers and critics used it in engaged debates about human sensation, experience, and forms of art. Paradigmatically, the German novelist Jean Paul stated in his critical treaty *Vorschule der Ästhetik* (1804) that "there is nothing that is swarming so much in our times than aestheticists" (Jean Paul 1990, 22): aestheticists arose as a personality type with a new way of approaching the world.[1]

Since Plato and Aristotle, beauty has been discussed and theorized, but as a specific dominator for a field of study and a discipline, "aesthetics" is a later invention. Referring to the Old Greek *aisthetá*, "that which can be sensed," the German philosopher Alexander Gottlieb Baumgarten (1714–1762) coined "aesthetics" to describe a philosophical discipline that investigates the "lower" sensual aspects of human experience as opposed to the "higher" realm of logic. Baumgarten's seminal work is *Aesthetica* (1750–1758, written in Latin), but he introduced the concept in his 1735 treaty on poetry,

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Meditationes philosophicae de nonnullis ad poema pertinentibus.[2] By explicating aesthetics in relation to poetry, Baumgarten set a norm for much later aesthetic theory. On the one hand, he employs "aisthesis" to describe a certain kind of human sensation applicable (in principle) to all human experience; on the other hand, he points to the arts for paradigmatic exemplification.

Often, then, a general philosophical reflection on ways of experiencing the world goes together with privileging art as a special case for expressing experience. On this basis, I will introduce aesthetics from a philosophical perspective and through the affiliation of aesthetics and art. Central themes across philosophical aesthetics and the aesthetics of art are questions of appeal to the senses (among which is beauty) and the epistemological impact on experience. I will return to the sensual component of aesthetics after this chapter and here concentrate on the epistemological component of philosophical aesthetics, which lays a foundation for my entry to the relevance of aesthetics for design.

Philosophical Aesthetics

First and foremost, aesthetics is a philosophical discipline. Philosophers have written about aesthetics, and "philosophical aesthetics" has been institutionalized as a discipline through journals and educational programs at universities. What is important in this context is the philosophical interest in aesthetics. In a philosophical perspective, aesthetics opens an investigation into certain modes or kinds of cognition and experience, where experience itself is at stake, reflected in or bordering on what it is possible to have experience of. In my view, Immanuel Kant's (1724–1804) seminal work *Kritik der Urtheilskraft* (Critique of Judgment, 1790) paradigmatically sets the scene for a philosophical reflection of aesthetics as it deals with how sensually given appearances are met by conceptual reflection and embedded in social contexts.[3]

Aesthetics in the Service of Epistemology

In *Kritik der Urtheilskraft*, Kant's ambition is to build a bridge between his two previous critiques: *Kritik der reinen Vernunft* (1781/1787), dealing with recognition or what can be known, and *Kritik der praktischen Vernunft* (1788), dealing with morals, ethics, and what cannot be known or experienced directly, such as God, liberty, and immortality. Ultimately, Kant's

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ambition is to pose an *epistemological* question: How is it possible to get from something that we know to something that we do not know and that may exceed our comprehension?

Kant's answer is to propose a judgment that starts in the sensually given and can reflect it but not comprehend it by a specific concept. Accordingly, Kant speaks of a "reflective judgment" in opposition to "determining judgment." Whereas a determining judgment serves to make sensual appearances and concepts symmetrically fit to obtain cognition, the reflective judgment describes an asymmetrical relationship and open reflection of the sensual without the determination of a pre-given concept. Kant relates this to a notion of "aesthetic ideas," which he sees as "that kind of apprehension of the imagination that entails much to think about, without some definite thought; that is, concept, being able to be adequate for it, and which, consequently, cannot be comprehended or made comprehensible by any language" (Kant 1995, 198 § 49). Aesthetic ideas do not have concepts as their starting point and may be a means of relating to a meaning beyond the given, to the *Vernunftideen*, by which Kant means transsensual ideas of reason.

The vehicles for this epistemological machinery are the experiences of beauty and the sublime, whereby Kant relates to the philosophical discussions of his time, especially considerations of beauty and the sublime among the British empiricists Edmund Burke (1729–1797) and David Hume (1711–1776). In Kant's analysis, something is beautiful "that without concept appeals in general" (Kant 1995, 78 § 9) and hereby may evoke a "disinterested and *free* pleasure" (66 § 5, his italics).[4] The experience of beauty or the sublime may in different ways open for us the working of the reflective judgment. As mentioned, the beautiful evokes pleasure, whereas the sublime evokes a feeling of awe (*Achtung* in German; Kant 1995, 125 § 27) in which the subject, in meeting something immensely large, experiences an "expansion of imagination" (116 § 25).

Kant states in a famous phrase (which, as a complex philosophical sentence, needs to be deconstructed) that "beautiful art" is a "way of imagining [Vorstellungsart], which itself is purposeful and . . . without purpose" (Kant 1995, 188 § 45). In this, Kant seems to aim at positioning "beautiful art" as a site of a special cognition, where direction and purposefulness are at play, but without being bound by any specific preknown purpose. Consequently, Kant has later been ascribed a notion of aesthetics as closely related to a

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contemplative reflection of art and, especially, of a kind of art existing only for its own sake (later to be named *l'art pour l'art*). Taking this to be Kant's view, however, would lead to misunderstandings.

First, art is not Kant's primary empirical subject in *Kritik der Urtheilskraft*. In its being as an external ontological entity that transcends human existence and thus challenges human subjectivity and comprehensibility, nature is the primary object.[5] Kant does, however, speak of examples of art, such as decorative arabesques or a poem by the Prussian Emperor Frederick the Great written in French. Second, Kant's primary interest is not the specific phenomena of nature or art but their role within his philosophical system and for human experience. In his analysis, art and nature thus provide entries to having experiences that fulfill his criteria for leading to "reflective" judgments; that is, as a reflection of sensual matter without the determination of pre-given concepts. As precisely pointed out by Moritz Baßler and Heinz Drügh (2021), beauty and the sublime are, for Kant, not qualities of objects but of human judgment.

In this way, the heritage from Kant is not primarily an understanding of aesthetics as a doctrine of the beautiful/sublime or how to perform judgments of taste to appreciate art in the right way, even if taste is an important element in his system and also related to a dimension of education.[6] Rather, the heritage from Kant is to embed aesthetics in a larger philosophical system and, more specifically, to position aesthetics as a reflection of an asymmetrical relationship between some given sensual material (artworks, nature) and a meaning that exceeds comprehension and language.

In discussing beauty and sublimity, Kant builds on British empiricism; for instance, Edmund Burke, who in his seminal 1757 treaty *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, categorized beauty and sublimity to investigate their psychological effects on humans. In this context, British empiricism is important to mention as it points toward psychologically oriented theories of how human subjects are being (positively) affected by something they see or engage with.

An example of this influence is affect theory (e.g., Gregg and Seigworth 2010; Brinkema 2014), where a guiding question is how "aesthetic practice . . . draws on dynamics of affects" (Nielsen 2021, 134). Further, British empiricism is directly influencing Ben Highmore's (2011) work on everyday aesthetics, where he stresses the role of the "human subject as originator of feelings, emotions and affects" (23). Highmore does not,

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however, convolute this in a psychological interiority but states that "aesthetics names the exteriority of 'interior' human life and the sociality of passions as they circulate in ways that are interpersonal and transpersonal" (23). In this conception, aesthetics is central for the human sensorium—for instance, in how humans are being "attuned" to certain sensations—and is part of a "sensual pedagogy (a shaping of perceptions, of sentiments, of discernments) that are constitutive of our sociality" (53–54). Hereby, for Highmore, aesthetics gets connected to the field of cultural studies.[7]

In contrast, Kant's ambition is not psychological (and Kant criticized Burke for being that) but epistemological in the focus on human cognition. Kant is also interested in the human subject—not, however, in its empirical manifestation and its, for him, arbitrary psychological responses—instead, aesthetics is for him a way of building a bridge between what can be known and what cannot. Kant's epistemological approach to aesthetics has had a different aftermath than Burke's and points forward to aesthetic theories that investigate the nature of meaning construction and appeal to the recipient in different kinds of artifacts, foremost objects of art.

Aesthetic Experience

A key question in the aftermath of Kant is what constitutes *aesthetic experiences*. That is, what characterizes the experiences that are the result of a meeting between subjects exercising aesthetic judgments and objects calling to be appreciated aesthetically? In chapter 3, I will deal with this meeting of subject and object as part of "the aesthetic relationship," and chapter 4 further explores the question of aesthetic experience in design.

For now, I will point out that the question of aesthetic experiences is a pivotal element in the tradition of philosophical aesthetics because it opens an investigation of what aesthetics is, even if philosophical aesthetics by no means is being exhausted by this question. Further, the question of aesthetic experiences may be a common denominator between central Anglo-American and Continental European approaches, which often stand in total disconnection. In this way, attempts to connect them can be seen in discussions of the subject-object dichotomy and the "evaluative, phenomenological and transformational" role of aesthetic experience (Tomlin 2008, 4).

In the Continental European tradition, Kant has been influential in focusing on questions of epistemology regarding how experience contributes to knowledge. As pointed to by philosopher Harry Lehmann (2016), the

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German coining of the concept *ästhetische Erfahrung* (aesthetic experience) aimed at understanding the dichotomy of subject and object in which subjects—on the basis of certain objects, primarily objects of art—may be affected and thus experience the world in new ways. This, then, can form, for instance, a deeper or enhanced sensation of everyday life or even a feeling of "emancipation" (22). Importantly, a difference in German exists between the words *Erlebnis* (being in a special moment of sensation) and *Erfahrung* (pointing to the structure of experiencing). The German tradition in philosophical aesthetics has foremost focused on the latter, even if exceptions do exist (e.g., Bohrer 1981; Böhme 2016).

In contrast, the pragmatist, Anglo-American tradition has tended to promote aesthetic experiences as special moments of sensation. I will here point to a line from John Dewey's 1934 *Art as Experience* (2005) and to Richard Shusterman's interpretation of Dewey in the 1992 work *Pragmatist Aesthetics: Living Beauty, Rethinking Art* (2000). In his theory, Dewey (2005) points to the special character of having "*an* experience," where "the experience is an integrated complete experience on its own account" (57) that, for instance, can be facilitated by works of art. Even though Dewey aims at general experience, he often points to works of art as examples of special catalysts. Dewey privileges qualities such as coherence, equilibrium, balance, harmony, and unity and considers artworks to "concentrate and enlarge an immediate experience" and present a "pure experience" that is freed "from factors that subordinate an experience as it is directly had to something beyond itself" (285–286), while "ordinary experience" is often "infected with apathy, lassitude and stereotype" (270).

In his later approach, Shusterman (2000) brings central elements of Dewey's philosophy (the general focus on experience) into the present while leaving other parts behind (e.g., Dewey's post-Romantic ideology of coherence). Ultimately, the harmony of aesthetic experience is bound to destabilize again as, in Shusterman's view, it stands in opposition to the vital forces of life. Shusterman opposes Dewey in stating the relevance of an experience-oriented pragmatist aesthetics for the understanding of popular culture that emerges along with mass media in late modernism. At the same time, he enhances the reflection on the role of the body in the aesthetic experience through the concept of "somaesthetics" as a way of studying "the experience and use of one's body as a locus of sensory-aesthetic appreciation (aisthesis) and creative self-fashioning" (267).[8] In Shusterman's approach, aesthetics gets

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embedded in a framework of sensorial and bodily sensation. With Shusterman, the aesthetic focus on the body reaches a culmination.

Aesthetics and Art

Almost since its inauguration as a discipline in the eighteenth century, aesthetics has been closely related to art. In his seminal work *Ästhetische Theorie* (1970), Theodor W. Adorno, one of the leading proponents of critical theory, pinpoints the beginning of the collaboration of art and aesthetics in the philosophy of the German idealist philosopher Friedrich von Schelling (1775–1854): "Ever since Schelling, whose aesthetics is called a philosophy of art, the aesthetic interest has been concentrated on works of art" (97). In Romantic-Idealistic works like *System des transscendentalen Idealismus* (Schelling 1800) and *Philosophie der Kunst* (Schelling [1802–1803] 1991), Schelling posits a philosophical discourse that articulates the "absolute," which foremost is the capacity of art to be the culmination and "eternal organ" of philosophy.

Art as Philosophical Vehicle

Just as art for Schelling is in the service of philosophy, the same is the case for G. W. F. Hegel (1770–1831) in his highly influential lectures on aesthetics, *Vorlesungen über die Ästhetik* (1835–1838). Hegel tightens the affiliation of art and aesthetics by stating that the object of the lectures is "the wide *kingdom of beauty* and, more specifically art is, and namely the *beautiful art*, its area" (Hegel 2003, 14, his italics). Interestingly, Hegel is aware that the name "aesthetics" "not really is suitable" because it signifies the science of the senses and sense perception, yet as a term it has entered common language and for that reason as "just a name" can be used for his purpose, even if "philosophy of art" or even "philosophy of beautiful art" would be more exact (14). In incorporating art into his speculative philosophical system, Hegel consolidated the role of art for philosophy and the close connection of art and aesthetics.

A way of synthesizing the later developments in aesthetics' affair with art is to differentiate between two ways of relating art and philosophy with each other.

First, art may play a role in philosophical discourse as part of a philosophical system, as in the case of Schelling and Hegel, or to prove a philosophical

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point. The latter is the case in Martin Heidegger's discussion of art as "setting the truth into the work," whereby truth should be understood as a non-disclosure and opening of being that in its "lightening" is more "being than being" (Heidegger 1950, 65, 40).[9] In *Sein und Zeit*, even though Heidegger ([1927] 1977) also analyzes ordinary things—for instance, in his famous analysis of *Zeug* ("stuff")—he exclusively attributes to art the ability to reveal a truth and be culturally important. In Heidegger's view, in rough, ordinary stuff may be good for being for something, but only in art "the objects may open a world for us" (Siegmund 2020, 157). In the perspective of a contemporary design aesthetics, of course, this limitation of objects must be contested.

Without necessarily aligning with the philosophical project of Heidegger's investigation of being, philosophers in the different traditions of philosophical aesthetics, whether Anglo-American or Continental European, have sought to investigate the phenomenon of art in a philosophical context. Art in this context is often implicitly understood as visual or spatial art, more rarely as literature, and even though concrete examples sometimes are employed, "art" or the "artwork" most often function as abstract positions in the argumentation and do not get specified.[10]

Reflecting the Potential of Art

Second, "aesthetics" as a term plays a role for a reflection on art, which may be philosophizing in its method and discourse but is not part of a philosophical system. In this way, Adorno's labeling of "aesthetic theory" simply signifies "theory of art." On this basis, a variety of aesthetic theories, where I will focus on a German context in the aftermath of Kant, has developed as a response to the need to understand art and to the challenges posed by art. Of special importance is the development and proposition of art as autonomous, purposeless, and special, which followed the uprising of bourgeois society in the eighteenth and nineteenth centuries. I will point to a line in the formation of the special capabilities of art.

Adorno is important in this context because he consistently has attempted to conceptualize art as a sphere of special meaning not possible anywhere else. In his *Ästhetische Theorie* (1970), Adorno takes a starting point in an analysis of the autonomy of art. He points out that, on the one hand, an artwork may stand in opposition to the empirical world and, within its sphere, produce its own "being" (10). On the other hand, Adorno is very much

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aware that this being within the autonomous sphere of art is problematic and that the sphere of art is not a place of consolation and harmony. Instead, he points out that art as an autonomous sphere does have the ability to be a "being of higher potency," "Sein zweiter Potenz," but what art may express is something that is repressed by the "compulsion to identity," "Identitätzwang," in reality, whereby the artwork always is dialectically bound to reality. Adorno directly says that the artwork is "related to the world by the principle how it contrasts to the world" (19). On this basis, Adorno designates a "double nature [Charakter] of art as autonomous and as fait social" (16); art is constituted as a special sphere, but it is always influenced by its surrounding context, especially in its form: "The unresolved antagonisms of reality return in the artworks as immanent problems of their form" (16).

On this basis, Adorno has proposed to view art as a sphere of otherness and productive negation in relation to given conditions in society and, in Adorno's view, the destructive logics of the capitalist society. The being of otherness is, however, always paradoxical. On the one hand, he states that every configuration of the "other" of the given must always be on the basis of the given, because "the non-being in the works of art is a constellation of being" (Adorno 1970, 204). On the other hand, (good) artworks constantly stand on the verge of otherness. He says that "fantasy" must avoid being "that cheap ability to escape being in proposing a non-being as if it existed" but may transform "what the works of art always absorbed from being, into constellations, through which they become the other of being, if only through the specific negation of being" (258–259).[11]

In the tradition after Adorno, the philosopher Rüdiger Bubner in his book *Ästhetische Erfahrung* (1989) similarly raised the question of how artworks may be media for specific aesthetic experiences.[12] In his analysis, artworks may be offering a reflection in which a "sensual starting point" leads to "the search for totality in the detail" (Bubner 1989, 65). Just as Kant's reflective judgment never can reach its fulfillment, so this proposed reflection can never reach conclusion but nevertheless open a new kind of experience. In further proposals, the "sovereignty" (Menke 1991) or "power" of art (Menke 2013) has been proposed, and the aesthetics of art has been conceptualized in relation to the evocation of experiences of "suddenness" (Bohrer 1981, 2003) or "epiphany" (Gumbrecht 2003).

A central aspect of the theories of art is the change of aesthetic topic stemming from the historical changes of art. In brief, whereas art for long

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was affiliated with beauty, many contemporary theories reflect the historical development of Western art in the twentieth century, such as avant-garde art and installation art, and have disregarded beauty (cf. Rebentisch 2013, 2016). Further, Adorno (1970) severely criticizes beauty as being deceptive given the real conditions of modern capitalist, post-Holocaust society. Instead, contemporary theories on art deal with questions of meaning construction, reflectivity, representation, the nature of aesthetic experiences in an age of cultural and social fragmentation, decentered subjectivity, medialization, and recently, digitization.

Separate Discourses

As a part of this historical development, the categories for aesthetic judgments have changed from beauty and the sublime to contemporary categories such as the cute, the zany, and the interesting, as proposed by art theorist Sianne Ngai (2012) in her book *Our Aesthetic Categories*, as a response to the changed conditions in culture, society, and the arts (discussed further in chapter 4). In this way, as an example, the category of the interesting relates to the distribution of information in a media-saturated, capitalist society, which further may relate to developments in digital media (Bollmer 2018).

In chapter 4, I will enter a discussion of the changing aesthetic categories and the role of beauty in design. For now, I point out that the developments in art and its affiliated aesthetic theory seemingly led in a different direction than the development of design. Modernism in the arts was entangled with avant-gardist movements focusing on experimentation in form and expression, and even if modernism in design might have been carried by the same spirit of searching for new expressions *on a par* with the modern world, the result was different.

Modernism in design to a high degree came into being as a search for a new, clean (and hygienic) expression of a new age of social reform through a critique of overt decoration and a focus on function. Subsequently, the ideology of cleaning up the past developed into a "style" (cf. Sparke 2013, 73) and led to conventions of simplicity and balanced clarity in the expression of form and function in the architecture and furniture designs of the 1930s to the 1950s. As a result, modernism in art and design went separate ways and, subsequently, also found different aesthetic discourses. Thus, one way of approaching the aesthetics of design has been to point out the

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separation in the early twentieth century between, on the one hand, avant-gardist experimentation of form and expression and, on the other hand, more classical notions of the well-formed and the beautiful, which were segregated from modern art and left for design to develop as part of the upcoming consumer-oriented product culture (cf. Stockmarr 2014).

In chapter 3, I argue that art-related aesthetic theories are still relevant for the aesthetics of design in dealing with questions of how objects of design may entail a critical reflection of the objects themselves as sites of meaning production embedded within cultural contexts. But this does not mean that design is to be seen as art, as design came to find its own aesthetic mode and expression. Instead, design may employ means of artistic reflection by its own means in operating as a frame for human experience.

In chapter 2, I review central positions in conceptualizing the aesthetics of design on its own terms. For now, this short, introductory chapter on the concept of aesthetics has emphasized the epistemological component of aesthetics. Aesthetics, in the conception I have brought forward here, deals with *experience*, *meaning-making*, and the coding of *objects*: Aesthetics reveals how human experience unfolds in relation to a meaning-making process of relating sensual material and conceptual meaning (Kant's legacy), which ultimately depends on the character of the objects it relates to. For this book, obviously, objects of design are in focus.

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2 Aesthetics and Design

This chapter introduces the concept of aesthetics in relation to design. The discussion about aesthetics in design is often founded on paradoxes.[1] Aesthetics is commonly related to design, especially in the popular everyday discourse on design, yet this relationship is rarely clarified; and while the concept of aesthetics is rooted in philosophy, the common understanding of what is "aesthetic" in design often remains unrelated to the philosophical reflection. My contribution is to qualify the discourse of aesthetics in relation to design and, further, to make it relevant for understanding design.

When entering the question of how to conceptualize the aesthetics of design, problems may arise as to what we are talking about and how the aesthetics of design relates to philosophical aesthetics, the discourse on art, or whether it characterizes a field of its very own. For design practitioners, aesthetics parameters may be a part of their working repertoire, often as a tacit knowledge (see chapter 5), whereas design historians, in an attempt to state a discipline of their own, for a long time have had an uneasy relationship with the concept "aesthetics" because of its link to art and art history (cf. Lees-Maffei 2014a).

I will present my proposal for a framework conceptualizing the aesthetics of design on sensual, conceptual, and contextual levels in chapter 3. In this chapter, I review the most significant contributions to the topic of design aesthetics in the last 15 years. The reason for limiting the review in this way is twofold. First, the period has witnessed an increased interest in the topic, which has attracted the attention of scholars of different disciplinary backgrounds. Second, the theoretical discourse on design aesthetics has been more prevalent in this period. The reason is, probably, that the aesthetics of design has developed from being a secondary theme to being dealt with

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along with all other aspects of design (such as function, interaction, and effect) to being a research theme in its own right and a starting point for dealing with design. Quantitatively as well as qualitatively, the field has thus consolidated in the last 15 years, although predominantly rather as an interest in an aspect of design than as a proper discipline.

Instead of presenting a diachronic-chronologically historical review, I structure the review synchronic-conceptually through the themes "beauty and function" and "appearance and pleasure." This approach does not provide a total overview of all proposals of the aesthetic in design but serves as an introduction to the field through key concepts and disciplinary positions. Further, a cumulative approach to all different formulations of the "aesthetic" in relation to design would lead us astray from this ambition, because the sum of all formulations is characterized by a high degree of conceptual heterogeneity, as skillfully demonstrated by design theorist Pernille Stockmarr (2014) in her thesis on the "status of the concept of aesthetics in the literature on design."[2] In some contexts, "aesthetics" may designate "form," and in other contexts, the meaning points rather in the direction of "creative practice." What I aim at, though, is to point to not only recent proposals but also their common contribution to an understanding of what design aesthetics is about.

Beauty and Function

One of the historically important tenets of aesthetics, beauty, has played a formative role in the perception and formulation of the aesthetics of design. In nonprofessional, everyday discourses on design, the aesthetic aspect of design is often related to notions of beauty as appealing forms or simplicity in expression.[3]

In everyday contexts, naturally, the aesthetics of design is not submitted to conceptual analysis. The same, however, is also the case in one of the earliest attempts to comprehend the aesthetics in design, David Pye's *The Nature and Aesthetics of Design* (1978). As an obvious statement, Pye links the aesthetics of design to beauty. For Pye, "design appreciation" is a matter of "beauty appreciation," to which there is no guide in the way that "each of us must learn to know beauty for himself just as he learnt for himself to talk and think and love" (100). For Pye, design can be a way to happiness and to break out of an "impregnable spiritual isolation" (102) as an element

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of the human condition, and the "only way in which design can make directly for happiness is by beautifying the environment and constantly enriching its visible quality: in short, by art" (104). In this way, Pye states that "design is an art, not simply a problem-solving activity" (105). This statement is in accordance with his view on design as work that considers the "look" of the "things we use" (11), which is the outer expression of design, for instance, in the form of "decoration" and "embellishment" (13). Pye's position is not, though, that of an art historian attempting to circumscribe design as a subcategory of art. As a design theorist (and practitioner), he uses the term "art" to describe the elevating effects that design may be capable of in "beautifying the environment." That is, he connects design to art in order to point to nonutilitarian and even spiritual effects of design.

In contrast to Pye's nonsystematic approach to the concept of beauty in design, analytical philosophers in relation to the discipline of philosophical aesthetics have demonstrated interest in the field of design and, as a part of this, employed beauty as a central concept. With "analytical philosophy," a focus on conceptual analysis and argument may be implied and, to some degree, a lesser focus on context, culture, and history, which then can be related to "continental philosophy." At the end of the day, the borders may be blurry, as most philosophers aim at conceptual clarity. Remarkably, however, the trend among analytical philosophers investigating the aesthetics of design is to relate it to the concept of beauty.[4]

The Beauty of Function

In the most developed treatment of the aesthetics of design, to date, from the perspective of the discipline of philosophical aesthetics, *The Aesthetics of Design*, Jane Forsey (2013a)[5] argues that design is a field worthy of philosophical attention. She argues that "a focus on design enriches aesthetic theory" (4) as design objects, which foremost are "functional, meant to be used rather than contemplated" (5), and that design is a part of a "rich aesthetics of the everyday, one that has direct significance for human lives" (7).

In her analysis, aesthetics judgments may vary according to the object in question, and "with design we . . . respond to the way an object performs its function with excellence and style" (Forsey 2013a, 248). In this way she analyzes how aspects of design and art, such as function and content, are constructed as "forms our judgment takes when we are confronted with the appearance of things" (177). Building on Kant's analysis of aesthetic

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judgments and the notion of beauty in *Kritik der Urtheilskraft*, she makes two important claims.

First, aesthetic judgments in relation to design do not take the form of the free play of imagination and understanding in the search for concepts in the reflective judgment but require "some amount of conceptual knowledge of the purposes we attribute to the objects we encounter" (148). As a result, Forsey connects design to "dependent beauty" in opposition to "free beauty." Further, Forsey points out that aesthetic judgments are not only "synchronic" in the Kantian sense of being of a general nature; all judgments of dependent beauty also contain a "diachronic" element due to the "shifting conceptual knowledge of form and function that is presupposed in our appreciation of the things that are integral to our lives" (188). Hereby, Forsey stresses the relativist character of aesthetic judgments not related to free beauty.[6]

Second, beauty in design is always to be appreciated according to the *functional* as a relationship of form and function in the design object: "While we can aesthetically appreciate the function of an object, we can also appreciate the *way* it fulfills that function by considering its *style*" (Forsey 2013a, 166, her italics). The core of Forsey's argument is, then, that design has its own kind of beauty, which is closely affiliated to function and, as a next step, to *use*, which also may imply that the judgment of beauty in design relates to signs of aging, such as patina (as a positive variant) and wear (as a negative variant). Forsey anchors her understanding of the aesthetics of design in the way "that we respond" to design, and a central part of responding to design objects is to handle and use them and to know what they are for—and through these aspects judge their dependent beauty in their way of performing their task.

An important aspect of Forsey's approach is her philosophical conceptualization of beauty. Instead of letting "beauty" be an imprecise metaphor of positively evaluated elements in the design as in much nonphilosophical discourse on design, her Kantian approach allows her to understand "beauty" as a vehicle in a larger epistemological discussion of how judgments are articulated and knowledge gained. On this point, I would argue that her argument has less to do with saving some more or less antiquated notion of beauty and more about understanding aesthetic judgments of design.

On a critical note, Forsey leaves open what characterizes aesthetic experiences evoked by the appraisal of function. She discusses the Kantian notion of perfection as an ability of the object to be "fulfilling its purpose,

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or being a good thing of its kind" (Forsey 2015, 214), whereby knowledge of the qualities of type of object is central. Hereby, she states that "purposive elements of an object have an ineluctable aesthetic component" where "our aesthetic judgements of the object are inseparable from our appraisal of how well it fulfills its function" (212). I will agree that function needs to be considered in aesthetic evaluations of design because of the purposefulness of design. How the evaluation of function, so integral in design, can be distinctively aesthetic remains open for further exploration.[7]

Whereas Forsey's *The Aesthetics of Design* is a plea for taking design seriously as a topic within (analytical) philosophical aesthetics, the 2008 book *Functional Beauty* by Glenn Parsons and Allen Carlson makes a broader argument for understanding the role of function in aesthetic judgments in relation to nature, architecture, artifacts, and art. The core proposal of Parsons and Carlson (2008) is that "aesthetics appreciation" involves "knowledge that concerns function" (xii). Also mainly addressing debates within the field of philosophical aesthetics, Parsons and Carlson aim at "comprehensiveness as a virtue for aesthetic theory . . . to illuminate as wide a range of our aesthetic practices as possible" (57). In addition, by pointing to the focus on utility and fitness of use in eighteenth-century aesthetic theories and in aesthetic theories beyond a Western context, they aim to challenge what they see as a norm in aesthetic theory of privileging disinterested contemplation at a distance. Parsons and Carlson point out that knowledge about objects, such as how objects perform their function, contribute to how objects are being perceived and appreciated; that is, "functional categories" are "capable of changing the object's perceptual appearance" (94).

Through the concept of a "phenomenology of Functional Beauty," they propose different ways that function "shows up . . . in the aesthetic qualities that we experience perceptually" (Parsons and Carlson 2008, 95). I will briefly introduce them as they are important in the argument of how function can play a role in aesthetic appeal.[8] First, pleasure can arise from appreciating things that "look fit." That is, they may seem fit for their purpose in the way that a sleek car may look fast. By looking fit, the function corresponds directly to the form of the object. Second, a cognitively rich understanding of the function of an object may affect how its form is perceived; for instance, when the powerful function of smartphones may lead to a perception of their form as effective.[9] Often, this kind of appreciation of form based on the knowledge of function is related to "qualities

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like simplicity, gracefulness, or elegance" to be found in modernist design. Here, the form of objects succeeds in conveying complex function that may not be evident on the surface of objects but present in the user's mind as a knowledge of high performance. In the last instance, a "pleasing dissonance" may arise if elements in the form are "contra-standard" (98–99) to the (well-performing) function of the object. In this case, for example, when a radio looks like something else, the aesthetic quality may be a "surprising vibrant look" or an aesthetically pleasing visual tension (99).

Parsons and Carlson's book is an ambitious attempt to (re)locate the question of function—and the knowledge of function—at the core of aesthetic appreciation. Hereby, they propose the concept of "Functional Beauty" to provide a "matrix of conventions for aesthetic appreciation" in relation to everyday objects (189). Just as in Forsey's approach, there is no doubt that an aesthetics capable of dealing with function is highly relevant for design, and Parsons and Carlson's book is one of the first to strongly have stated this. Nevertheless, the flip side of their comprehensive theory of "Functional Beauty" is a tendency to reduce design to the functional. Further, they seem to confirm given conceptions of beauty as leading to a "sort of appreciation" (231) of a positive kind. In contrast, Forsey's analysis embeds beauty within a broader understanding of epistemology in much the same way as Kant did.

In his later book, *The Philosophy of Design*, Glenn Parsons (2016) relates the discussion of function and beauty directly to design. Embedding design in the modernist discourse of how form should relate to or even "follow" function, he understands the modernist heritage of design in that "beauty or aesthetic value is to be cultivated simply through the pursuit of functionality" (103). Parsons, rightly, points out that the relationship between form and function often is complex and indeterminate; in most instances, function cannot be read through the form of the design object, but function underdetermines the form by not simply motivating or causally leading to specific forms. This is clearly the case in technological artifacts such as radios and smartphones. Here, the outer shell can take many forms to convey the highly complex inner workings of the object. On the one hand, then, Parsons refers to a "variety of ways function can affect our perception of the object's form, and hence its aesthetic value" as design "involves a multiplicity of ways in which form and function can relate to each other" (120). On the other hand, he does not place the focus on function alone; "it

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is not the functionality of an item that renders it beautiful: rather, it is the item's economy, or frugality with respect to its form" (117).

Foremost, Parsons's approach is productive in anchoring its discussion in relation to the important discussion of form and function. In this regard, though, his concept of modernism is not unproblematic. By prioritizing modernist discourse, the discussion is led to the central concept of function. But, by taking modernism as his point of departure and as a basic norm for design—a rather abstract concept of modernism, as pointed out in a review by Stuart Kendall (2018)—Parsons imposes an unnecessary constraint on his discussion, which makes it difficult for him to see beyond the functional and to contextualize the ideology of functionalism in design.[10] Additionally, the concept of beauty is uncontested but simply identified with "aesthetic value." It remains unsettled whether "beauty" is substituting "aesthetic value" in a nominalism of terms or has ontological foundation in signifying certain qualities, even if Parsons (2016) enters a broader discussion of aesthetic experiences without directly relating them to beauty (e.g., 109–110).

Function without Beauty

Being part of a Continental European tradition, the German philosopher Daniel Martin Feige has proposed a different entry to the aesthetics of the functional in design in the 2018 book *Design. Eine philosophische Analyse*. His book deals with several topics in relation to design—for example, history, action, symbolic meaning, and criticism—but aesthetics is a pivotal concept of the book in opening an understanding of the specificity of design in dealing aesthetically with practical functions. In his central formulation carrying marks of a Heideggerian discourse, Feige (2018) defines design in the light of aesthetics and as a way of accessing the "world," even if he also challenges Heidegger's privileging of art as a means of accessing the world:

> Design is an *aesthetic form of practical world-disclosure*. As world-disclosure, design provides the world with a specifically human face; as aesthetic phenomenon, this happens in different ways depending on the object. [As aesthetic objects, design objects] define problems in new ways in the light of their solutions. (Feige 2018, 9, his italics)[11]

On this basis, Feige aims to conceptualize an aesthetics specific to design, an ambition he shares with Forsey. In contrast to Forsey, Parsons, and Carlson, however, he leaves behind the concept of "beauty." Instead, he places function at the center of the aesthetics of design. If "the aesthetic is to be

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understood as a special way of being attentive of the particular feature of the particular," and the special feature of design objects is to be functional objects of use, then the suggestion is that "the function [das Funktionieren] of design objects is a genuine aesthetic category" (Feige 2018, 88–89). In Feige's analysis, the aesthetics of design is not the same as the aesthetics of art, dealing with a "process of reflection," and it is not the same as the "contemplative dwelling at the sensual specificity of objects" (89) to be seen in relation to the sensual engagement with things.

Instead, the aesthetic definition of design is basically to be found in the function of design objects, because this is specific to design objects in their way of creating a "particular form of relating to objects," "eine besondere Form des Gegenstandesbezugs" (91), which Feige sees as a defining factor for aesthetics. The contrast of design and art is put to formula in a later text:

> *Design forms practice, while art is a practice to thematize practice. Design is in its form world-disclosing, while art reflects in self-willed forms that we are world-disclosing beings*. (Feige 2020a, 183, his italics)

Hereby, the difference is that design points us to the world, whereas art points us to ourselves as humans experiencing the world; he describes art as an "act of reflection" that enables an "auto-thematizing of those [us] who experience the world" (Feige 2020a, 171–172).

As a next concretizing step, Feige (2018) anchors the function of design objects in their form. He states that the "fundamental aesthetic level of design consists of the irreducible being-formed of the function in design objects" (143).[12] For Feige, this implicates seeing the aesthetics of design in the "*specific unity of form and function*" (131, his italics), where form is regarded to be inextricably connected to a defining function and thus the opposite of a free-floating ornament.[13] Function is what the object is good at performing, and this function is, optimally, irreducibly formed in the design object. In Feige's conception, the aesthetics of design thus goes to the inner or the core of the design, which is the ontological status of being an object of function. We cannot look at the surface of objects alone, even if "most proponents of design theory still confuse the aesthetics of design with questions of the looks, sounds and haptics of design objects" (106), but have to acknowledge function, and because no "unformed functions" can exist (137), form is important, but only in relation to function.

Feige's strong focus on the unity of form and function as the heart of design aesthetics gives his analysis a conceptual specificity but leads to a

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theoretically motivated purism of how the functional can be expressed through a form inextricably bound to the function in question. Feige (2018, 108) normatively states the function of an object to be "irreducibly incorporated through the object in question," just as he states that "*every successful design object reinvents its function in the medium of processes of giving form [Formgebung]*" (138, his italics).[14] Seemingly, Feige here confirms a modernist ideology of basing form in function, much as Parsons does in his 2016 book. However, Feige (2020a) may see a foundation of the aesthetics of design in function, but his point is that form in design objects always reinterprets function, whereby design objects as "specifically formed functions" offer "an aesthetic shaping [Formung] of our practice" (181)—that is, practice of interacting with the world. The question is, however, how this unfolds when scrutinizing concrete design objects.

On this point, Feige's approach to the aesthetics of design as a matter of function is too general in its scope: How is it possible for each new object in a class of objects, for instance, vases or chairs, to continuously reinvent and reinterpret the function? Seemingly, Feige (2020b) attempts to answer by pointing to the specific realizations of function. In his view, aesthetic judgments build on a reflexive relation to the "particular as particular" (58), which in this case would be a uniqueness of a specific function. But, as Feige notes, the particular always depends on a general concept, which in this case would be the functional concept of chairs: a chair is for sitting. Feige attempts to solve this tension between the particular, which leads to aesthetic judgment, and the concept of general function by claiming that we should "no longer reflect in an *abstract* way upon the functions and purposes of artefacts—for instance, that chairs are for sitting" (59, his italics). Instead, we need to know the history of sitting, of "*designed* and *formed* sitting [des *gestaltenen* und *geformten* Sitzens]" (60, his italics), and how design objects always relate to and define human practice. Hereby, however, Feige ends on an abstract note. Thus, a deficit in Feige's philosophical approach is its concrete application for understanding, analyzing, and differentiating between actual functions of, as an example, different chairs in order to describe how they are aesthetically particular in terms of function.

In a more pragmatic approach, Jakob Steinbrenner (2010) suggests the "practical function" of design objects, "and not only their appearance" (19), to be aesthetically evaluated if seen within an aesthetic system of signs. He states an "aesthetic system of signs" as a system that defines which characteristics

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of an object are "aesthetically relevant" (16). Although Steinbrenner tends to define aesthetics with references to the domain of art—that is, as being in opposition to objects of purpose and function (thus employing a prevalent method of segregating function from aesthetics)—he does attempt to relate the two domains to each other.[15] His point is that design objects are not seen as works of art, even if the aesthetic systems of works of art are in play, and that we instead see the functional aspects within an aesthetic reference system. In his view, the defining factor of "design" is when its "functional features . . . gain value within an aesthetic sign system" (20), a statement not far from Feige's position. In the end, the aesthetic sign system is contextually defined. The role of context for understanding what is being regarded as or positioned as aesthetic is also a core element in my approach, which will be developed in chapters 3 and 4. As important contextual frames of reference, Steinbrenner points to artistic movements that design can relate to (e.g., the relationship of Bauhaus and post-Bauhaus design to, for example, the experiments of space and color in the avant-garde movements of the first third of the twentieth century), or design history, as design does not develop in a vacuum but always exists in a "continuation of historical design culture" (20).

To sum up, the focus on function as the basis for aesthetic appreciation or for the aesthetics of design as such marks an important shift away from an approach to the aesthetics of design as linked to a contemplative reflection of the outer form and looks without any relationship to the function or purpose of the object in question. On this basis, especially Forsey and Feige share many components. The focus on function is seen as an unavoidable condition for the aesthetics of design; the specific ways that objects enable and perform function, for instance, through their form, are important (even though they provide little concrete analysis of the implications). Furthermore, by establishing function as a basis condition, the demarcation between design and art is important and discussed at length by both authors.

The question is, however, if art needs to be left out of consideration. In a discussion of the "demarcation criteria of functionalism," Judith Siegmund (2020) points out that "practices of design not only are functional practices . . . but practices of relation to the world in many regards," for instance, also "social, ethical, and aesthetic relations to the world" (150, 153). She does not clarify her concept of aesthetics but merely sets it in opposition to the function, which not only makes her concept difficult to relate to Feige's

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and Forsey's positions but also risks confirming traditional dichotomies of function versus form, purpose versus non-purpose, that she actually wants to distance herself from. Nevertheless, her point is that design, as well as art, in different variations may contain functional, purposeful elements as well as purposeless elements. Consequently, her claim is that design and art may not be that different.

I will draw a different conclusion. I will follow Feige and Forsey in claiming the categorical difference between design and art but also acknowledge the element of art in design, or rather the presence of artistic means and an artistic kind of reflecting meaning (cf. Foraita 2011; von Oppeln 2011). I will discuss this as a conceptual dimension of aesthetics in chapter 3.

Appearance and Pleasure

The concepts of beauty and function have, to a high degree, set the norm for how to approach the aesthetics of design. Beauty has for a long time been affiliated with aesthetics in general and therefore also with design aesthetics. Function is a rather new and more design-specific concept in relation to aesthetics. Both concepts put emphasis on *qualities* of the design solutions in question, even if the actual evaluation of these qualities always is dependent of individual perception.

A slightly different emphasis can be seen in proposals primarily focusing on the *effect* of the design, whether in the way design presents itself to us in its "appearance," seeking to produce new aesthetic experiences, or in the effect to evoke positive emotions through pleasurable products. Whereas aesthetics in relation to beauty and function seem to matter mostly to philosophers, the concepts regarding the effect of design are mostly dealt with by design theorists affiliated with design practice. In the rhetoric of the texts, "designers" are often addressed along with questions of what to consider as a designer or even normatively how to design.

Emphatic Appearance

In an important article contribution to the discussion of design aesthetics, Annina Schneller (2018) points out that "appearance" is a core concept for how design ontologically is defined and has effect. In stating that only "through the ways in which a design object appears to us can its intended effects really come into action" (39), she engages the concept of "appearance" to build a

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bridge between the outer "surface" of the design, relating to "form," and the "interior" or the functional aspect of the design. In her view, design always "concerns itself with what lies *below* the surface, because designing the form necessarily involves questions of function, effect and use" (41, her italics). The surface/form relates inextricably to function, and vice versa.

By privileging the appearance of the design object as an entry to understanding the effect of the design object, Schneller gains several insights. Ontologically, appearance turns into a defining factor of what design is. Not only is "special attention" often "given to the *appearance* of the object, such as an attractive, futuristic or elegant look or feel" (41, her italics). But "giving artefacts a particular appearance" is a way for designers "to intervene in the lives of users or beholders in very specific ways" (42). Through their appearance, design objects appeal to users and relate to them. The appearance lets the "intended effects really come into action" (39). This fosters the bold claim that "the distinction between 'real' properties and mere 'appearance' becomes obsolete in the case of design objects" (43). We can only gain access to design objects through how they appear to us; their appearance is their "reality."

The ontological focus on appearance leads, in Schneller's analysis, to the concept of aesthetics in relation to "multi-facetted sensual impact generated by the things surrounding us" (43) and not only, as in tradition, the appreciation of art or nature. Schneller's point is that design objects through their appearances more emphatically than other kinds of phenomena call for aesthetics experiences.[16] As she writes:

> In this cornucopia of things that provoke aesthetic experiences in our daily life, design is special because it deliberately and purposefully does so and because of its special form-giving skills. (Schneller 2018, 44)

Schneller not only points out that design has become important for aesthetic attention because of changes in notions of art and high and low culture in the twentieth century, but she bases her main argument on the importance of design on its emphatic appearance. In this way, she argues that "design *must* be very clear and deliberate about the aesthetic experience it wants to create and about the functions that are to be served" (46, her italics). In contrast, art may also aim to achieve specific effects and aesthetic impact and even contain a kind of function of making people think or see things in a new light, but it does not emphatically need to do so. Because "design seems to be the *techne* [i.e., human creation] that is most eagerly

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and specifically directed towards the creation of aesthetic experience" (46, her italics), design may take over the role of art as the "paradigm case for future aesthetics" (48) in general.

In my approach to design aesthetics, appearance is also important as a concept, not least in relation to the sensual aspect of aesthetics. Schneller makes a convincing argument for claiming the importance of "appearance" as a "bridging concept between design ontology and design aesthetics" (the subtitle of her article), but her analysis contains some critical points. First, not all design may be emphatically appearing or work with appearance in the same way. When she states that "designers must create well-defined appearances and aesthetic experiences by virtue of mastering the principles of form in all its details" (47), discrete or anonymous design not aiming for a highly detectable recognition seems to be out of the picture, along with the complexity of digital design objects, which often appear quite differently than they perform.[17] In this way, her concept of appearance would benefit from a differentiated analysis of different modalities of appearance. Further, talking about "form in all its details" resonates a focus on form that often is to be found in traditional design training as learned in art schools. Second, even if Schneller discusses aspects of the aesthetics of art—for instance, as a "self-referential surplus" of pointing to processes of meaning creation (45)—she sets this aside as not being part of the appearance of design. In my perspective, reflective aspects can also be part of the communication of design objects and, in relation to this, their way of appearing (cf. chapter 3).

Exactly the question of the reflectivity of design is at the heart of Annette Geiger's 2018 book *Andersmöglichsein. Zur Ästhetik des Designs*. In Geiger's view, aesthetics deals not only with special sensual experiences but even more with a "*reflection* about the sensual being of things" (Geiger 2018, 86, my italics). In this regard, Geiger pleads for the productive role of design for creating cultural meaning, even though she points out that everyday stuff of design in most critical and aesthetic theories of the twentieth century has been denounced, whereas art has been praised. On this point, she articulates her decisive notion of aesthetics as a reflective way of opening possibilities in design. Through design, Geiger argues, we can get "new and other ideas"; aesthetics is, then, a relevant discipline because it "opens contexts for the possibility of being other" (57). At the end of the day, she regards design as a way of opening new spaces of possibility and aesthetics as a means to reflect how this has effect:

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> Design aesthetics is less a theory of the beautiful things than a theory of the reflective living with things. Exactly the history of design is only to be interpreted in this way: It asks how people through the aesthetic engagement with artefacts and scenarios project the possibility of the world to be different [das Andersmöglichsein von Welt entwerfen]. (Geiger 2018, 100–101)[18]

Geiger (like Schneller) speaks from the perspective of the designer, and in pointing out that designing is always infused with the possibility of designing differently—and even the normative urge to follow the "idea of reform" and confront the given with the possible (97)—she sees this reflective openness of design as a defining factor for the aesthetics of design. Geiger (2018) speaks of the view on design as a "specific form of aesthetic perception" (11) and a "Sichtweise der Dinge," a way of looking at things (16), which, at least as I understand Geiger, has to do with the kind of immanent reflection of being other, which she sees as central for design. Design signifies not only existing things but also always new possibilities to be realized in continuous reforms.

On a critical note, Geiger's approach is less focused on aesthetics than on design. Her concept of aesthetics is not very well defined. Rather, it is part of a broad understanding of what I would call the sensual-reflective ontology of design. In this way, in her 2018 work, the subtitle "The Aesthetics of Design" implies aesthetics to be a theory of what design is—that is, its general ontology. I would by no means contradict the ontology of design to be sensual and reflective and that this can be described as aesthetic; it is just that Geiger's approach lacks specificity in *how* design is sensual and/or reflective.

An intense focus on this "how"—that is, how concrete details of design objects contribute to their creation of appeal—is in focus in Richard Herriott's *The Aesthetics of Industrial Design: Seeing, Designing and Making* (2022), a work positioned as a textbook for design students (and design practitioners at large). Herriott describes the creation of consistent visual appeal as it unfolds in "form and line, the aesthetic dimension" (51) of design. Basing his argument on a characterization of visual cognition, such as the aim to construct wholes in Gestalt theory or the contribution of anthropomorphisms to make objects appear "cute," Herriott follows the objective that "the designer is interested in controlling forms to reduce ambiguity" (48). Herriott makes no claim of entering a philosophical or culturally oriented discussion of the role of aesthetics in design but goes directly to what he sees as the central aspects of the aesthetics of industrial design—that is, 3D objects industrially mass-manufactured and how the appearance of

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design unfolds in curvature, joints, surfaces, chamfers, compound forms connected by, for instance, fillets, and how shininess and a play of "positive and negative space" (110), light and shade, "adding a dynamic element to the perception of form" (112), are created.

On these points of detailing, Herriott has a sharp eye, and he acknowledges the many factors at play when working with design: the role of manufacture and craftmanship in "designing objects to look as well made as they can be" (120) and the ever-present balancing in design practices of constraints such as cost, the desired quality of the object, its purpose/function, and its appearance. Herriott regards material to be subsumed under appearance, "given that forms have to be made of something" (52), leading him to interesting observations related to the interdependence of (desired) form and (often constraining) material. In continuation of this, he explores principles of manufacture guiding what is possible to be designed as "form." Further, he proposes a "range of options available for the designer in controlling the form" between, on the one hand, order, symmetry, and clearness, which reduce stimuli, and, on the other hand, complexity, asymmetry, and unclearness, which may increase stimuli (179).

Being an educator of designers, Herriott's ambition is ultimately to be instructive and prescriptive, which lends the book a normative tone of creating products that are positively appealing, smooth, consistent, visually "homogenous-looking" (99), reducing ambiguity and noise, having "pleasing or even very pleasing surfaces that are the hallmark of carefully finished industrial design" (97), and/or evoking "wow" effects.[19] Herriott's ambition is to let the designer's care, skills, and craftmanship shine through the product so that it becomes "demonstrative of industrial design finesse" (136) with a "perceived quality" (138) of robustness, utility, and beauty. Good industrial design objects, according to Herriott, demonstrate an effect of effortlessness.

We should, of course, appreciate that designers are being educated to design "good" products (and not doing the opposite). Ultimately, the strength of Herriott's book is its ambition to seek practical application in an applied (industrial) design aesthetics. On this background, he leaves the wider philosophical discussion and cultural contextualization to other authors.

Positive Emotions

Whereas Schneller and Geiger discuss how and why design can have effect by aesthetic means, and Herriott at length goes into detail how this job can

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be done, positions within experimental psychology and cognitive science start with the human subject and investigate different kinds of aesthetic responses and what has triggered them in the design. In general, a psychologically motivated view of aesthetics is driven by an interest in the nature of experience, especially how aesthetic experiences of beauty may be positive and lead to pleasure. This approach has led to a general interest in the nature of the aesthetic experience in its generic character of emotional and psychological responses (e.g., Schaeffer 2015). The psychological approach has been dominant within practice-oriented approaches to design and often has been led by an ambition to improve the practice of designing.

Beginning in the 2000s decade, the focus has been on the "pleasurable" and how emotions may play various roles in product design. In particular, Patrick Jordan's *Designing Pleasurable Products* (2000) and Don Norman's *Emotional Design* (2004) have been influential in opening research perspectives beyond product usability by acknowledging the various responses that humans can have to products (see also Green and Jordan 2003). In general, the recognition of the pleasurability or emotionally appealing features of design objects marks a desire to understand aspects of design other than functionality and, further, how these aspects affect the process of designing (e.g., Desmet 2012; Hekkert 2014; Hekkert and Leder 2008). For example, a corkscrew may solve the task of opening wine bottles but also may be a pleasure to handle (cf. Cila et al. 2015). In particular, Jordan's (2000) framework of four different pleasures, building on Lionel Tiger's (2017) assertion of the "moral, scientific, and political authority of pleasure," (276) has demonstrated the potential for understanding products through their appeal to pleasure. In this way, pleasure not only relates to physical sensation in the interaction with products but also may relate to social well-being, psychological responses of satisfaction or of fulfilling a task, and the ideological level of feeling alignment with personal values and beliefs.

The question of pleasurable appeal has been at the core of the psychologically oriented Unified Model of Aesthetics (UMA), a Dutch project where a team of researchers over four years (2011–2016) pursued "unraveling the mystery of aesthetic enjoyment" and creating a model to predict how "aesthetic pleasure we gain from . . . designed artifacts arises out of a delicate balance between ranges of opposing forces" (UMA 2017), which has been formulated as "principles of unity-in-variety, most-advanced-yet-acceptable and autonomous-yet-connected" (Berghman and Hekkert 2017, 136). From

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the psychological-empirical position of the project, aesthetic experience is seen to draw on "factors of a perceptual, cognitive as well as social nature" that "can effectively be traced back to evolutionary drives" in a "fundamental balance between safety and accomplishment" (137).

The strength of the project has been to understand the connections and possible correlations between psychological responses and the design of things, condensed in the question on the project home page: "Why do we like things?" (UMA 2017). A central finding, based on empirical testing through surveys, has been to differentiate subjective-arbitrary responses from general traits that call for common responses, such as the balance of unity and variety in the objects:

> Compared to cognitive and social qualities, which depend on personal experience and circumstances, unity and variety can be deliberately manipulated in a more straightforward way as they refer to the organization of the perceptible elements of a design. Our findings therefore have immediate relevance to design practice, as they indicate that for designers focusing on these qualities is worthwhile. (Berghman and Hekkert 2017, 142–143)

It follows that designers need to specify in each design process what a balance of unity and variety would look like in their specific context. Furthermore, the project has investigated concepts relevant for aesthetics such as efficiency (Da Silva, Crilly, and Hekkert 2016), product metaphors (Cila, Borsboom, and Hekkert 2014), and the role of knowledge for aesthetic appreciation (Da Silva, Crilly, and Hekkert 2015).

What I would like to contest, though, is the concept of aesthetics at play. In its psychological foundation, the project remains committed to aesthetics circumscribing a positive emotional response, often related to the pleasurable. It may be a debate on terminology, but the concept of aesthetics propagated by Project UMA is more limited than my conception of aesthetics. The same word may be used but imply different content. In my terminology, Project UMA deals with sensual aesthetics in the sense of "sensory delight" (Berghman and Hekkert 2017, 136) and to a very little degree with conceptual aesthetics in the sense of objects evoking reflections about their being (as also implied by Schneller) or with contextual aesthetics in framing the conditions for enabling something to be seen and attributed meaning as "aesthetic."

In these approaches, the focus is on how aesthetic objects may create sensual appeal and effect; that is, where sensual elements of the design are

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conceived to create a positive and affirmative response in the recipient. In this vein, Pernille Stockmarr concludes her thesis on the concept of design aesthetics by suggesting that "a deepening fusion of ideas from the emotional theories of design and the philosophical notion of the aesthetic as sensual experience would be able to take the discussion of the aesthetic in design in new directions" (Stockmarr 2014, 202–203). The thesis stops, however, at this point and does not show or discuss how this could be done. On a more critical stance, I will argue that the sensual-positive notion of design aesthetics propagated by this thesis and many of the psychologically oriented positions only take one aspect of design aesthetics into account and not, I will especially point out, the conceptual dimension.

In a productive reflection, the pleasurable has been connected to the question of sustainability. In *Aesthetic Sustainability: Product Design and Sustainable Usage*, philosopher Kristine Harper (2018)[20] employs aesthetics to explore the thesis "that the most significant and fundamental way to transform the world of design is by creating solid, well-crafted, and enduring objects" that, in addition, may influence "consumers to purchase fewer but better design" (2). Like the above positions on the pleasurable and emotional appeal, she addresses the work of designers. In opposition to technical, production-oriented approaches to sustainability, such as the focus on different metabolisms in producing objects (cf. Braungart and McDonough 2008), but in high accordance with the focus on recipients' positive response to "emotionally durable design" (Chapman 2005), the main point can be stated in this way: if designers work consciously with aesthetic parameters in designing, they may be able to create objects with a longer durability and, hence, sustainability.

On this basis, Harper sets out to describe different kinds of pleasurable reactions to design: the pleasure of the familiar in "boosting" the patterns of the existing in opposition to the pleasure of the unfamiliar in "breaking" the patterns. Almost without any references to the existing literature on design and the pleasurable, Harper develops her argument by relating design aesthetics to the traditional categories of the beautiful (as confirming the existing) and the sublime (as breaking with or challenging the existing). On this point, the book can be read not only as a plea for letting aesthetic concerns enter the discussion on sustainability but also as a plea for the actualization of the aesthetic categories of the beautiful and the sublime.[21]

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Pleasure Contested

Focusing on the pleasurable may not, however, lead only to (the design of) better, long-lasting, sustainable relationships with objects but may fuel a never-ending desire among consumers. Not only may the pleasurable produce an "imaginative hedonism," where the imagination of consumers is being triggered (cf. Campbell 1987), always leaving the consumers to want or expect more, but the actual satisfaction of one pleasure may, paradoxically, just lead to new desires, not a fulfillment. (My getting an emotionally stimulating watch does not necessarily mean that I would only ever desire that particular watch; instead, I might begin to desire to collect more watches.) Most of the literature dealing with the pleasurable builds on normative premises and aims to feed into design practice and to help designers design better products that consumers find more pleasurable. What this literature tends to overlook, however, is the drive of consumerism and, accordingly, the economic and financial aspects of dealing with the pleasurable. Especially, Harper's proposition that working with aesthetic parameters would entail more durable products needs to be critically challenged in this regard; she proposes different strategies of working aesthetically with appeal to experience, but it seems a fallacy to imply that this could lead to more durable and sustainable products. Instead, against the intention, these products may just trigger the desire for new products.[22]

Using the concept of aestheticization, I will in chapter 3 discuss central aspects of *design being made aesthetic* in order to form part of a wider context of consumption—for instance, through the notion of "commodity aesthetics" (Haug 2009). For now, I will, in the words of the philosopher Carsten Friberg, point out that the pleasurable is not only an ideal ambition in design but always permeated by economics: "Economic interests target the sensorial and move beyond sensorial appeal as an element of fascination and seduction in products and environment and into any perception whatsoever" (Friberg 2019, 52). In his analysis, economy is omnipresent not only as an empirical fact (the search for profit is everywhere) but as an underlying element in the cultural practices of how "we perceive ourselves and the environment" (43) when the world that we meet and the way that we meet the world always is carried or followed by an economic interest. Friberg's response is to employ aesthetics as a "critical approach" for "creating awareness of how we perceive" (56) when economic interests permeate our perception. In contrast to the predominantly uncritical attempts to deploy

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the pleasurable to create tools for a better design practice while not reflecting the consequences in a larger context of consumption, Friberg aims at a true critical, even if open-ended, reflection of the role of aesthetics for design (see also Friberg 2003, 2007).

Furthermore, the one-sided focus on pleasure and positive emotions has been critically debated by design researcher Thomas Lee. In his article "Too Much Fun: Contemporary Aesthetic Theory and Design," Lee (2017) embeds design aesthetics within a context of cultural theory and asks what happens to aesthetic experience "in cultures where pleasure, fun, and leisure become abundant" (302). When pleasure becomes the prime consideration (along with "play" over "work"), it not only calls for management (which would cast a new light on an initiative such as Project UMA), but it becomes addictive in a requirement of ever more of pleasurable sensations. Lee's proposal is to counterbalance the pleasurable with its opposite, to let the smooth be counterpoised by obstacles: "The calculated integration of obstacles into regimes of pleasure is particularly useful in a situation where being perpetually sated and stimulated is a neutral condition" (Lee 2017, 305)—that is, a situation where a condition of "too much fun" is being naturalized as the starting point for experiencing. With his diagnosis of the "peculiar aesthetic conditions of the late capitalist modernity," Lee points out that aesthetic experiences related to "proliferation, dilution, and intermixing of experiences that characterize cultures of abundance" always contain a dialect of positive and negative, such as pleasure and friction, of luxury and morbidity, fun and unfun (309). On this point, Lee especially finds support in the Sianne Ngai's (2012) aesthetic theory, which points out the inner tension of aesthetic categories when, for instance, the interesting is contrasted and complemented by boredom.

Lee's approach testifies that an aesthetics of design—or aesthetics in general—productively is to be seen and reflected in the light of the present cultural condition. As stated by Wolfgang Welsch (1990), aesthetic settings that are too calculated and arranged might lead to a numbness in perceiving these settings as aesthetic. Too much aesthetics could result in the "an-aesthetic," a state of being where the "elementary condition of the aesthetic, the ability to feel, has been negated" (Welsch 1990, 10). In contrast, Lee (2017) points out the inner dialectics of aesthetics today. People seek fun and pleasure, but in order to avoid too much abundance, which could result in addiction, opposing forces need to be built into the design. In

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the same vein as Project UMA and others mentioned above, Lee leaves this job to the designers. When "people navigate pleasure-saturated contexts . . . designers [can] help prevent a perniciously addictive relationship with the means of navigation" (313). That is, designers should be conscious about the power of their design to frame the contexts that people live and navigate in.

Of course, a corkscrew should be good and even pleasurable to handle (nobody wants a bad corkscrew), but absorbing us entirely into pleasurable interaction would be to confirm a larger cultural condition where nothing offers any resistance, much like a world of virtual simulation, where everything is visible, smooth, and possible. Too much pleasurable interaction and smoothness would risk being an oppression of its opposite in a difficult materiality full of resistance, and the oppressed would return in distorted form if neither acknowledged nor considered. In the case of electronic products, the tendency has for a long time been to immaterialize and seek the optimal interaction, but if everything runs too easily and automatized, people lose contact with what is happening in the interaction, such as when devices communicate with each other without human control.

On this point, Lee points out that a dynamic of fun and unfun, pleasure and obstacles, is worth considering. This dynamic is, I add, a complement to the tendency to seek only the pleasurable and positive emotions, dominant in the practice-oriented literature on design aesthetics. Design aesthetics does not only deal with how to design ever-better products with ever-better sensual appeal but also with reflective experiences of what things are, why they have come into being, and which experiences they encourage.

In chapter 3, I will expand the concept of design aesthetics to comprehend three dimensions. Besides sensual elements such as form, appearance, and pleasurable appeal, on which the previous research foremost has focused, I will add conceptual and contextual dimensions of design aesthetics.

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3 Design Aesthetics: A Framework

In this chapter, I propose a framework for design aesthetics that draws on several approaches to and perspectives on aesthetics. In my view, the combination of aesthetic theories offers a comprehensive and systematic framework for analyzing how design objects and solutions frame human experience. My proposal is to investigate this meeting through three dimensions of aesthetics:[1]

- In the *sensual* dimension, the focus is on sensory appeal. That is, we can examine how design objects—by sensory and tactile effects, outer shape, and use function—create an appeal to human experience. This is not a matter of style but of the object relating to and framing the conditions of experience.
- In the *conceptual* dimension, the staging of meaning by design objects is in question, which regards, on the one hand, the appeal to understanding by human subjects and, on the other hand, the ability of the object to encourage a reflection about it.
- In the *contextual* dimension, the focus is on how design by different means is reflected, regarded, and positioned as "aesthetic" and what should gain attention.

In total, this framework comprehends different aspects of how we meet the world through design objects. Objections to this proposal could be that other theoretical frameworks might be more comprehensive for investigating the communicative aspects or "meaning" construction in design in general. Competing approaches in design semiotics or product semantics have described such frameworks of investigating layers of meaning and their embeddedness in different kinds of contexts of meaning (e.g., Gros 1983; Krippendorff 1989; Vihma 1995).

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My argument is, conversely, that the sensual, conceptual, and contextual dimensions of aesthetics grasp core aspects of the communicative appeal of design objects and, more important, that as part of an aesthetic framework, they comprehend meaning construction at the interface of object appeal and human experience. In this way, design aesthetics can be effective in differentiating between different ways in which design relates to and frames experience. We can look at sensual, conceptual, and contextual aesthetic dimensions of design and examine their contribution to framing experience. Consequently, I do not offer a comprehensive theory of all meaning aspects of design but a theory of design's relation to experience. Accordingly, aesthetics in this approach does not deal with beauty or art, as the focus is in parts of the tradition of aesthetic theory, but with the articulation, communication, and staging of meaning in relation to experience.

In the following, I introduce the framework in three steps. *First*, in the short section on "the aesthetic relationship," I establish the premise for my approach to aesthetics. As a part of a phenomenological relationship between subject and subject, the aesthetic does not have a site or an essence per se but evolves in a meaning-creating, experiential relationship between objective and subjective. *Second*, I propose the theoretical framework of aesthetics. Even though aesthetic meaning always evolves as a relationship between subject and object, I will start with the *object* as a vehicle for framing experience. *Third*, I discuss the cultural role of aestheticization—that is, the construction of something as "aesthetic" by factors external to the object. This aspect deals particularly with the question of meaning production in a cultural context and stands in continuation with the presentation of the contextual dimension of aesthetics. In its discussion of the production of aesthetic categories in the context of contemporary culture, the section points to chapter 4.

The Aesthetic Relationship

In its philosophical tradition, reaching back to Kant and beyond, to Baumgarten and the English empiricists, aesthetics deals with human experience, judgment, and appreciation of specific sensually or cognitively appealing phenomena. Consequently, a dominant discussion in aesthetic theory has been about the *location* of the aesthetic, its site in the act of aesthetic appreciation. Kant's *Kritik der Urtheilskraft* is symptomatic of this discussion. On

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the one hand, he speaks of value judgment and taste, which are matters of subjective concern. On the other hand, the purpose of his philosophical investigation of the field of aesthetics is to search for trans-subjective criteria for aesthetic evaluation in a *sensus communis*. In his conception, the judgment of taste is bound to objective condition and not submitted to arbitrary subjective evaluation.

We can take this reflection beyond Kant. On the one hand, we may ask what kind of special subjective experiences aesthetics calls for. For example, is it experience of coherence, harmony, and unity (Dewey 2005; Shusterman 2000) or a feeling of "pure presence" (Seel 2000) or "moments of intensity" (Gumbrecht 2003)? Furthermore, the subjective experience of aesthetics is also the starting point for theories with a focus on psychological response and affect.

On the other hand, we may ask what encourages aesthetic experiences. In relation to design, the analytical question is to determine the means by which objects encourage aesthetic appreciation and evoke aesthetic experiences. Thus, some objects seem more than other objects to promote an aesthetic appreciation of certain qualities. From the history of the arts, we may notice that objects within the domain of the arts seem to have the effect of encouraging aesthetic appreciation, and thus one of the key tasks of art-oriented aesthetic theory has been to describe these characteristics in works of art. In this sense, the scholar Gérard Genette (1999) speaks of objects with an "intentional aesthetic function" (2) aimed at being perceived and experienced aesthetically.

In a general reflection, we can state that aesthetic meaning evolves and can be described as an epistemological *relationship* between a subject with an intention to see and perceive something as aesthetic, to have aesthetic experiences, and an object with certain aesthetically coded features. This prohibits any assumption of aesthetics as an inherent essence of certain privileged objects (e.g., high art or objects of ancient Greek or classical provenance) but investigates how "the object works in appreciative experience" (Berleant 2010, 92), which is to say, in a special mode of experiencing.

Types of Relationship

In his theory, Genette regards the aesthetic relationship foremost as *functional* in the sense that meaning always only may be given in the interrelation of subject and object. Besides being functional, the aesthetic relationship

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is also informational, contextual, and, to return to the starting point, phenomenological.

It is *informational* because it takes place within an act of communication; the aesthetic message is sent off with some sort of artistic intention (to employ Genette's terminology) in order to be perceived by a receiving subject in a certain way.[2] That is, aesthetics evolves within the framework and the factors of an act of communication; what is aesthetic is, so to speak, agreed within the chain of aesthetic intention → coded message → aesthetic perception. Thus, this act acquires its value and importance in certain contexts that ultimately define what is perceived and appreciated as aesthetic. In this sense, a large part of the history of aesthetics has been about normatively defining the right framework of appreciation, from Schiller's ambition in his 1795 treaty *Über die ästhetische Erziehung des Menschen* (1910) of letting the creation of the new, ideal nation go through the aesthetic education of man, learning the value of beauty,[3] to the later development of a canonical discourse on the value of art, the establishment of art museums as temples of artistic appreciation, and the education of "good taste."

Next, the aesthetic relationship is *contextual* insofar as it is defined and circumscribed by an "aesthetic system of signs," as a "system that defines which characteristics of an object are aesthetically relevant" (Steinbrenner 2010, 16). Such a "system" will always depend on situation, location, and historical conditions. Different sign systems exist in different times and places. Kant's evaluation of the aesthetic qualities of arabesque patterns and a poem of Frederick the Great in *Kritik der Urtheilskraft* relate to a different aesthetic system of signs as, say, Scandinavian minimalism of the 1950s or contemporary Japanese design. Often philosophical speculations on aesthetics only investigate the relationship of subjective appreciation and evaluation, on the one hand, and the aesthetically appealing object, on the other hand. All experience is, though, embedded within a context that in many ways influences the horizon of the actual experience and how it is evaluated. Already Kant looked for an intersubjective space of aesthetics in his concept of *sensus communis*. Aesthetics "posits emotions and effects as social, collective and exterior" (Highmore 2011, 9) because these emotions are learned in a social context. My point is that the relationship of subject and object is a basic tenet for the location of the aesthetic and that this structure of aesthetic experience must be seen within the contextual factors that condition it, such as habits, cultural valorizations, conventions, and so on.

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Last, the aesthetic relationship is, as indicated, *phenomenological* in the sense that it builds on experience. Concepts by the French phenomenologist Maurice Merleau-Ponty (1964) are helpful for specifying how. First, he states that experience is not an abstract concept, even if in philosophical discourse it can seem so, but always takes place in a body embedded in the context of the world. Second, he deconstructs the dichotomy (and relation) of subject and object and places them in a sort of continuity that he calls the flesh, *la chair*. He speaks of density of the flesh as a means of communication between the viewer and the object. Similarly, the body is located in a chiastic structure within the world. "The body participates in the order of things, and likewise the world is universal flesh" (Merleau-Ponty 1964, 179). Experience, in Merleau-Ponty's analysis, is an ongoing exchange between subject and object that takes place in the common material of *la chair*. Further, *la chair* is a means of relating experience to the world and thereby stating that experience is never without context. The point is that contextual factors belong to the phenomenological framework as they define how experience can take place.

Aesthetic Coding

This said, and taking the relational as a defining point of aesthetics, I will focus on the coded features of the design objects. On the one hand, all sorts of objects (chairs, refrigerators, tables, garden gnomes, smartphones, citrus squeezers, works of art) may serve as vehicles for aesthetic appreciation according to individual and idiosyncratic taste, even if the context may contravene this notion. There are, for instance, strong conventions to regard garden gnomes as bad taste and hence, in a traditional sense, to fall outside positive aesthetic appreciation. Still, in principle, virtually anything can be regarded as aesthetic if we choose to view it with an aesthetic perception. Yuriko Saito (2017, 4), a leading figure in the Anglo-American philosophical trend of "everyday aesthetics," is in this way a proponent for our need to "keep focusing on the sensuous quality experienced with sensibility" and to be "more attentive," with the aim, in the end, of cultivating an aesthetic literacy of the everyday. This literacy should, in my view, not be normative, as in Saito's approach, but differentiated. In this way, garden gnomes can be appreciated for their sensual appeal or their value as kitsch in a reflective manner.

On the other hand, there are differences in the *degree of aesthetic coding*. This raises the question of how some design objects encourage aesthetic

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appreciation more than others and the quality in the object that this is based on, for instance, the functional (as privileged by Forsey and Feige, among others) or the sign value (as in kitsch objects).

My approach to aesthetics is to look at the coding strategies of the objects rather than at the subjective experiencing. I may share with Saito an interest in the question of how aesthetic concerns are integrated in and affect our world. But whereas her interest in the everyday leads her to view everything in an aestheticizing light, hereby emphasizing the aesthetic perception of the subject (being "more attentive"), my interest is to understand how design operates as a complex medium for processes of creating aesthetic meaning.

Sensual, Conceptual, and Contextual Aesthetics

I present an interpretive framework for investigating the formation and articulation of aesthetic meaning in design in sensual, conceptual, and contextual dimensions.[4] Table 3.1 summarizes the dimensions in how they affect the framing of experience and how they relate to the contextual dimension of aestheticization as a way of producing meaning in a cultural context. I will present the three dimensions in turn and subsequent discuss the role and effect of aestheticization.

Sensual Aesthetics

The sensual dimension of design aesthetics takes as its starting point an investigation of the sensual communication of the form and the material-tactile

Table 3.1
Dimensions of aesthetics in relation to design

Dimension	Sensual	Conceptual	Contextual
Framing of experience	*Framing by means of sensual aspects in objects, use, and material interaction*	*Framing of understanding through concrete objects and solutions*	*Framing of systems of meaning; ideology*
Aestheticization as meaning production in a cultural context	*Production of (too much) sensual effect—to the point of the "an-aesthetic"*	*Staging of reflective meaning potential*	*Cultural production of new aesthetic categories (topic of chapter 4)*

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dimension of design objects. In aiming to grasp the sensual qualities of design, the interest is directed toward the distinctive appeal of design to the senses, mostly through sight (visual), touch (haptic), and hearing (auditory) but also through smell (olfactory), in the scent of materials, and maybe less commonly through taste (gustatory), even if metals may be experienced to have a taste. The interest in the sensual dimension of design should not thus be confounded with an exclusive focus on form and surface, even though form and surface also are important to acknowledge, for instance in the experience of different materials, such as wood, plastics, or metals, but deal with the material handling and experiencing of the function of the object. Superficial styling may be an element of the sensual aesthetics of design, as the surface appeals to the senses, but my point is, then, that all aspects of the surface of design objects can be seen as the kind of interface that makes us meet the world in specific ways.

The interest in sensual aesthetics is rooted in a trend in aesthetic theory that since the 1990s has revisited Alexander Baumgarten's original idea of applying aesthetics to sensual matter in the 1750–1758 work *Aesthetica* (2009); in Old Greek, *aisthetá* means "that which can be sensed"). The focus on the sensual has caused a move away from art as the topic for aesthetic consideration to general sensuous experience and, further, to questions concerning how reality is arranged and perceived aesthetically. The latter is the topic of a new era of aesthetic theory that has been unfolding especially in works by the philosophers Richard Shusterman (2000), Arnold Berleant (2010), Martin Seel (2000, 2007), and Gernot Böhme (1993, 2001, 2013, 2016). Tellingly, the title of one of Böhme's works, lectures on *Ästhetik als allgemeine Wahrnehmungslehre* (*Aesthetics as a Common Doctrine of Perception*) (2001), features the Greek root of the word aesthetics: *Aisthetik*. In addition, the focus on sensual aesthetics relates to investigations of the role of the body in aesthetic experience; in this way, Shusterman (2000) has coined the concept of "somaesthetics" to study "the experience and use of one's body as a locus of sensory-aesthetic appreciation (*aisthesis*) and creative self-fashioning" (267; cf. also Bhatt 2013). In a summarizing formulation, sociologist Andreas Reckwitz (2015) points out that aesthetics, in the tradition from Baumgarten, at its core forms an "analytics of specific sensual perceptions" (22), which unfolds in an analysis of where and how aesthetic perception takes place and, as a next step, how "aesthetic experiences" take place.

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In rough, these inquiries deal with aspects of sensual appeal and appearance within the framework of the aesthetic relationship: The question is, on the one hand, how people respond to certain kinds and structures of sensual appearances and, on the other hand, how these are arranged and constituted in order to evoke response. In this way, the design research on the topic (e.g., the Unified Model of Aesthetics, or UMA, project) often poses the question of how aesthetic objects may create some kind of sensual or emotional appeal and effect—that is, how sensual elements of the design aim to create a positive and affirmative response in the recipient. Thus, design objects may be seen to create aesthetic sensations or experiences if they succeed in being psychologically appealing.

In my approach to the sensual aesthetics, I will point the investigation in the direction of the role of the design objects in the aesthetic relationship and ask how the sensual qualities of the design objects contribute to the framing of experience. Through the concepts of *appearance* and *ambience*, I will consider the aesthetically appealing features or qualities of the design objects by asking how they take part in or nurture an aesthetic experience of them.

Appearance

Through their appearance, design objects may appeal sensually to us. More precisely, the appearance of design objects is one of our primary ways of accessing them.

As a first step, we can ask for the different means in the appearance of design objects that create appeal to the senses. I differentiate between static and dynamic aspects, while remaining aware that they might intersect.

Aspects of appearance *Static* aspects of the appearance of design objects have to do with the look, the sound, the smell, the feel of soft, smooth, or rough textures, the application of materials, and the execution of the detailing in the assembly, seamless fittings, curvature, chamfers, and instance, fillets such as they are explored by Herriot (2022): in sum, the overall physical presence of the design. In this way, design researcher Annina Schneller (2018) has pointed out that in most design, "special attention" is "given to the appearance of the object, such as an attractive, futuristic or elegant look or feel" (41). She claims further that this attention to appearance is what distinguishes "design" from other kinds of objects having a more anonymous appearance.

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The *dynamic* aspect of appearance relates to the basic characteristics of design as objects of use, to be handled in a process of "material interaction" (cf. Dant 2008) and to be unfolded in time. The object even may change its appearance in the course of this interaction. An example is a corkscrew's changeability when used.[5] Whereas the focus on static elements of the material and formal appearance of the object resembles the traditional aesthetic appreciation of disinterestedness and distance to be found in Kant and in (traditional) art-related discourse, the focus on the dynamic aspect of the appearance of the objects is specific for design. In most instances, design is not experienced in acts of contemplation as a kind of proto-art but in bodily proximity, situated use, and dynamic interaction.[6] As pointed out by Andreas Reckwitz (2018, 67), use may itself be "a sensual-affective process." Design objects may, however, be staged by companies, shops, and museums to encourage a distanced contemplation vis-à-vis art when, as an example, a design object is put on display on a pedestal, even though the default condition of design objects is to be interacted with as part of use situations in everyday life. The use of a design object may be delimited to single, clearly defined actions of fulfillment and consummation and in this way relate to Dewey's (2005) criteria for having *an* experience in an "ordered and organized movement" where "flow is from something to something" and integrated in an "enduring whole" (38, 40). But use may be without this perfectioned, intense quality of a somehow harmonized whole; it may be open-ended and perhaps even unordered and chaotic in its character. The point is that use is dynamic and places the design object at a proximity to the user.

All the while, dynamic and static aspects of the appearance of design object coexist. As part of a competitive market, design objects may be designed to be grasped by the eye in one single moment—for example, as displayed in the shopping window to evoke a "spectacle" or an "intensive fascination," for Baßler and Drügh (2021, 100) a signal of contemporary aesthetics—while they necessarily unfold in time as part of a use situation. Design objects may thus comprehend both aspects at the same time: be dynamic utensils *and* static appearances, sometimes on the verge of being like images.

Attracting attention In the next step, the question is how the appearance of design object may enter the aesthetic relationship and be a part of an aesthetic appreciation. On this point, philosophical conceptualizations are helpful. In Martin Seel's aesthetic theory, appearance (*Erscheinung*) is

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a general term for the way the world is given to our perception. He points out, then, that beside an ordinary perception of the appearances of the world, we can talk of an "aesthetic perception" (*ästhetische Wahrnehmung*) that not only invests itself in the immediate appearance of the world, in the sense that the world is given to us as "a momentary and simultaneous abundance of appearance," but also intensifies the appearance of the pure present that is otherwise inaccessible to ordinary perception (Seel 2007, 13). To Seel, aesthetic perception is a matter of looking in a certain intent way that involves "*attention to a play of appearances*" (13, his italics), a kind of enhanced perception of character and details of appearances. From the side of the things, reversely, we may ask how this looking can be facilitated or encouraged by the sensual qualities of the object, both in its static or dynamic aspects: How does it attract our attention by the way it appears?

In the end, the aesthetic perception touches on *how* the world is seen and *what* in the world is seen. Consequently, Seel emphasizes that his approach to aesthetic perception is neither a way to a higher reality nor a way out of the "lowlands of reality" (13). Instead, it is a way of seeing something in *this* reality that otherwise is inaccessible for ordinary perception:

> We do not perceive something *other* as the world of sensual objects, but we perceive them throughout *otherwise*: With an intensified feeling of the here and now in the situation, in which the perception takes place. (Seel 2007, 14)[7]

In the focus on the kind of experience, Seel's concept of aesthetic perception resembles Dewey's (2005, 57) notion of "having an experience," where experience is seen as "an integrated complete experience on its own account."[8] In Seel, as well as in Dewey, the character of the experience as well the character of the way of having the experience come into focus. As enhanced, de-automatized perception, as stated by Russian formalist Viktor Shklovsky (1993), aesthetic perception is not just a vehicle for what is going on in the world but is reflectively called into question. In aesthetic perception, hence, perception is the opposite of being fixed but always dynamically at stake. At the same time, it is marked by an immanence of seeing or experiencing more deeply or more intensely. It is not, as stated by art critic Clive Bell (1914, 7), paradigmatic for a traditional view on art, evoking a transcendence in a "world of pure aesthetic ecstasy" to which the art with its "significant forms" can "transport" the informed viewer. Instead, it is, as put by Arnold Berleant (2010, 85), a "perceptual experience, experience that is never surpassed or transcended."

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Further, Reckwitz (2015) coins the term "aesthetic practices" to describe the aesthetic approach to the sensual world. Aesthetic practices are not only a specific way of engaging with the sensual world but relate also to "the *production* of aesthetic perception" (22, my italics). Hereby, he poses the question of how aesthetic perception is conditioned by factors outside perception itself. First, Reckwitz points out that, potentially, aesthetic practices can be found everywhere in relation to sensual perception. Second, a series of structural elements for aesthetic practices can be pointed out. In opposition to practices directed toward purpose-oriented action, aesthetic practices deal with sensual perception in itself, with an "auto-referential character of perception" that often has a focus on sensation/experience (*Erlebnis*) (26). An arousal of the senses often takes place, not with a purpose (e.g., to enable an action) but in its own right.[9] Further, aesthetic practices are often affiliated with "creative" creations, with play and interpretation when the produced "signs" appear as "open and ambivalent" (28) because they are not directed toward some instrumental goal of action.

We may then ask how design objects in different ways, by sensual means, appear in order to attract attention and, hence, to be perceived aesthetically with "attention to a play of appearances," an "intensified feeling of the here and now in the situation" (Seel 2007) or as part of an aesthetic practice with a focus on some kind of "auto-referential character of perception" and sensation/experience (Reckwitz 2015). With regard to static appearance of the design, we may ask how qualities of physical presence of the design object in form, material, detailing, fittings, and so on appear to the senses and whether any aspects of the design object call for special attention in "their own qualities as sensual appearance" (Oldemeyer 2008, 58) and somehow make us aware not only of the object but also of our perception of it.

Attention may be called for through new, unexpected ways of relating formal appearance (e.g., shape and color) and material properties (e.g., weight, flexibility, and texture) in objects. As Ludden, Schifferstein, and Hekkert (2008) point out, "visual-tactile incongruities" (29) are often used to create surprises in objects. In this process, the "familiar" forms a base for creating "newness," and the new and the familiar may be combined in several ways—although, for instance, new materials may have unknown characteristics or new materials may look familiar but are not, such as a vase looking like glass but being made of plastics.[10] Next, clashes of form/appearance and materiality may nurture a conceptual reflection of the object.

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The shininess of objects makes special case of attracting attention. As discussed by cultural theorists Leonard Diepeveen and Timothy van Laar (2021), shininess provides objects with a surface reflecting light, which may let objects seem "precious" and "superficial" at the same time (15). Shininess can further be seen as an "effect of directed and concentrated light, attracting attention," always meaning and "promising something," such as "newness, efficiency, hope, and even, perhaps, the utopian" (13–14) or else cleanliness and hygiene. Being a part of an object's design, shininess is a static quality, reflecting "light in a regular, organized way" (16) that needs, accordingly, to be "controlled" (18), but this quality has always a dynamic aspect because it unfolds and changes with the movements of the object and the user.

Furthermore, we may, with concepts from Martin Heidegger's (1977) famous analysis of "Zeug" in *Sein und Zeit*, pose the question of how objects transform from being invisibly "present-at-hand," where the object is not noticed, to being "ready-at-hand," where the "mode of being of the stuff manifests itself in its own right" (69). Heidegger points to three modes of letting the character of the objects be present instead of just being invisible, unnoticed, ready-at-hand: the modes of "conspicuousness, obtrusiveness, and obstinacy" (74).[11] In Heidegger's analysis, stuff mostly gets noticed when it breaks (his example is a hammer), which is when the basic reference to its purpose get interrupted. In this process, the reference to a purpose, a context, and a totality of stuff gets visible whereby, in Heidegger's phenomenological perspective, "the world announces itself" (75). Beyond this limitation to only noticing stuff when it breaks, his concepts may prove productive for questioning conspicuous, obtrusive, and obstinacy *appearances*. In relation to the dynamic appearance of the design, the question is whether and how the design object in use creates a situation where the function not only is a vehicle for some purpose, such as opening a bottle of wine, but creates a dynamic interaction where, possibly, the act of opening a bottle of wine is experienced in a new way, such as when the arms of an Alessi Anna G. corkscrew may seem obstinate when you work to get the cork out of the bottle. An important element of acknowledging new, not-habitual experiences or "surprises" is that they do not stay new or continuously eventful but eventually become habitual.

The reflection of *function* plays an important role in the conceptual dimension below; here, the focus is on how function also may contribute to the aesthetic perception of a "play of appearances." If Feige (2018, 143)

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points at the role of function for the aesthetics of design by claiming that the "fundamental aesthetic level of design consists of the irreducible being-formed of the function in design objects," I will claim that it is not enough to state the form of function in design without also stating *how* function attracts attention and appeals to our perception. The question is, then, how the experience with the object through its function and use leads to aesthetic experiencing.

Appearance at play Two different examples will illustrate my point: a chair, which is an archetype of (static) design, and a digitally operating product that offers new kinds of interaction.

The first is the *Vegetal* chair designed by Ronan & Erwan Bouroullec in 2008 and manufactured by Vitra (figure 3.1). In its sensual appearance, the chair presents a design object with a strong emphasis on look and formal and material qualities. The chair is remarkable because of several features. In its material, which is dyed-through polyamide, the chair appears not only monochrome (in six different colors) but also monolithic, as if made of one piece of material with many seamless fillets and joints. Next, its shell appears as an open-structured, asymmetric web of interconnected strings. Given the name of the chair, Vegetal, French for plant (and marketing material from Vitra states: "planted by Ronan & Erwan Bouroullec, grown by Vitra"), the shell attracts attention to a "play of appearances" at the intersection of its appearance-as-chair and the plantlike appearance in the shell. Of course, the use of the chair may submit to its function as a chair, where users do not notice it but just sit in it, but I will argue that it is designed to attract attention, to be noticed for its play of appearances, which intensifies the perception of the chair. Next, we may ask if the chair encourages some kind of dynamic interaction that would change the experience of it. On this point, uses of the chair can be flexible (and encourage social interaction at, for example, business meetings), but the chair is itself a static object that does not change its character when in use.

My second example is the Philips Hue light bulb, which by being controlled by an external device, such as a smartphone, can light in multiple colors (figure 3.2). When one interacts with it, the light bulb does not change its outer shape (as would the corkscrew) but still changes its appearance. The light bulb is an example how digital technology can affect the being of the design, which I will explore in depth in chapter 6. Here, the point is that the experience offered by the light bulb is not obtained

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Figure 3.1
Vegetal, 2008. Design by Ronan & Erwan Bouroullec. Photo credit: Vitra.

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Figure 3.2
Philips Hue. First generation marketed 2012. Photo credit: Signify/Philips.

only by appreciating its static formal and material qualities—in unlit condition, the bulb seems quite ordinary—but revolves around the possibilities enabled by employing digital technology to create new experiences for the user. In this perspective, then, the aesthetics of the object should be judged not only by the object's external qualities but also its specific capability of easily, innovatively, or provocatively creating or enabling new experiences for new kinds of flexible lighting in interiors. In this way, Philips Hue is an example of contemporary design in which the specific form is not the primary driver of aesthetic perception; what is in focus is the *experience of the effect of its function*, which not only lets the bulb be lit in multiple colors but also may contribute to the ambience of its surroundings and, further, lets us be aware of and perceive our experience of function.

Ambience

In a next step, the phenomenological question is how design objects in their overall appearance contribute to the framing of experience. On this point, another philosophical concept will be helpful, namely, Gernot Böhme's concept of ambience (*Atmosphäre*). Böhme's (2001, 132) initial claim is that aesthetics as *aisthesis* takes as its starting point a sensually perceptible reality as a doctrine of appearance ("Erscheinungslehre"). In this context, ambiences are the "primary *object* of perception" (Böhme 2013, 48, his italics). Through the concept of ambience, Böhme evokes a reflection of the interlaced structure of subject and object, which is the foundation for the

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aesthetic experience. Almost like an explication of Merleau-Ponty's notion of *chair*, Böhme deconstructs the dichotomy of subject and object, defining ambience as a kind of relationship between subject and object.

The point is that ambience can emerge only if there is an experiencing subject. However, it is not an inherent part of the subject but also objective as the result of an effect evoked by a specific constellation of things. Hereby, ambience can be seen as an entry to our conceptualizing how design, as part of our surroundings, may create meaning for us in a dialogue with us. That is, we do not just experience our surroundings but the surroundings also affect our way of experiencing them. The central point is the radical co-constitution of subject and object within the overall frame of the ambiences:

> Obviously, ambiences are neither conditions of the subject nor characteristics of the object. Still, however, they are only experienced in the actual perception of a subject and are co-constituted in their being, their character, through the subjectivity of the perceiver. And even though they are not characteristics of the objects, they are obviously produced through the characteristics and interplay of objects. That is, ambiences are something between subject and object. They are not something relational, they are the relation itself. (Böhme 2001, 54)

Consequently, our presence in the world affects how and what we perceive, and what we perceive affects our presence in the world. In the words of Carsten Friberg (2019, 51), ambience "draws attention to how we, in being present, are subjects to how the presence of the environment makes us . . . present in specific ways."

In this context, three aspects of Böhme's theory are particularly important. First, as a theory of sensuous experience and relations, the main concern of aesthetics is how ambience works and constitutes a specific relationship between subject and object. A "real reality" may exist behind the operations of ambience, but what is important to aesthetics is the "reality of appearance," which emphasizes how (perception of) "reality" is mediated through ambience, the effect of surface and form, and the value of staging meaning (Böhme 2001, 121, 159–164). In this way, the theory of ambience can be seen to be a theory of the ontology of appearance: what appearance is and how to approach it.

Second, ambience is experienced and expressed as a coherent whole. Instead of separating the various aspects of sensuous experience (seeing, hearing, touching, smelling) and asking how one sense might evoke effects in another, or separating things from their context, ambience serves as the

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perceptual background against which things and surroundings present themselves and where one may look for sensuous differentiation. In this context, Böhme discusses the traditional aesthetic concept of synesthesia, where the perception through one sense leads to the perception through one or several other senses, such as a sound may seem to have a certain color. In Böhme's analysis, especially color may appeal not only to the visual sense but more broadly create an ambience. Contributing from a social-semiotic perspective and predating Böhme, Jean Baudrillard (2005) in this vein suggests that ambiences alternate between hot and cold, warmth and distance, in their totality of staging a meaning.

At the same time, things can stand out as special on this background. Böhme (2013, 107–108) employs the Old Greek word for ecstasy, *ekstasis* (for being out, *ek*, of a fixed condition, *stasis*) to describe "ways of stepping out of itself [Aus-sich-Heraustreten]," how things "can radiate into a space," and what "they accomplish as generators of ambience." Böhme (2001, 132) explicitly points out that the stepping out of itself of the thing takes place in a spatial context as a way for the thing to show itself, as "ways of articulating presence."[12] In this way, Böhme's concept of ecstasy has less to do with what things are than how they are present (cf. Bille and Sørensen 2019). Consequently, Böhme differentiates between *qualities* of things, which have to do with making something possible, such as an action, and their *ecstasies*:

> In the aesthetic creation, the focus is strictly speaking not on qualities, that is, about something which things in themselves have and can have effect their use, something which may be purposeful and purposeless, but the ecstasies are in focus, that is, the way in which things step out of themselves and how they present themselves in a space. (Böhme 2001, 137)[13]

As a means to obtain ecstasies, Böhme especially points to the role of *color* because, he argues, it can affect whole spaces. Colors are not qualities of things and therefore not "spatially to be limited to the place of the thing; instead, they radiate to the whole of the space" (Böhme 2001, 139). At the same time, the "being ecstatic of the thing lies often not in the colors themselves" as an ontological substance but in their "articulation" through, for example, "contrast, competition, punctuality, border, etc." (139). Further, abstract qualities of form such as volumes and lines are also added to the inventory of contributing to the effect of "the perceivable presence of something" (143). On this point, Böhme describes a phenomenology of the present versus the absent and of the clear versus the unclear. Things can by different

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means have ecstasies and step outside their ordinary being, which leads to the next aspect.

Third, ambience is not only something to be experienced but also something to be made or manipulated. Effects of colors, volumes, and lines can be produced. Böhme speaks of "aesthetic work," the intention of giving things, surroundings, and even people certain qualities that let them appear as special, with a power of appeal to be perceived in a certain (controlled) way. Thus, aesthetic work is a way of staging the perception of something as aesthetic. In this context, he mentions creative areas such as stage work, commercials, art, architecture, and design, as examples. In the case of color, Regina Blaszczyk (2012) has lucidly demonstrated how a new breed of professionals working with color developed in the twentieth century and, in accordance, color systems have been made and standardized. Color has become a means for designing for experience.

Böhme's notion of aesthetic work is linked to the concept of the experience economy and to strategies of aestheticizing all aspects and elements of our surroundings, which is a key concern in late-modern societies as discussed below (cf. Pine and Gilmore 1999; Schulze 2005). Böhme also talks about "aesthetic economy" and, more recently, about "aesthetic capitalism" in order to conceptualize the changes in the economy from use value to aesthetically oriented stage value (Böhme 2016).

Design as a Structure of Appearance and Ambience

The interplay of appearance and ambience of design sets the condition for experiencing. In its appearance, design forms an interface through which we experience the world; that is, it sets the frame for experience, and with the concept of ambience we not only focus on the object itself but also the surrounding context that the object is part of and contributes to. Thus, we may ask: What is the appearance of the design? How does it call for attention (and for aesthetic perception)? What are its ecstasies, and how does it contribute to creating an ambience?

To anchor this analysis in concrete examples, the Philips Hue light bulb would contribute to creating the world we are in not only by its appearance but even more (and perhaps only) through its effect for creating ambiences. In so doing and in working with colors, this light bulb would also be a dream product for Böhme, confirming his theory. Other products do not, of course, radiate in such concrete ways. Still, qualities can transform into

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ecstasies, such as the play with volume in the open back, asymmetric lines, and especially the monochrome color in a Vegetal chair. Next, Böhme gives special attention to space as an encapsulating interface for human experiencing. Hereby, his philosophical "ambience" gets close to everyday meanings such as "mood" or "atmosphere" ("this room has atmosphere") while also relating to disciplines within interior design and architecture, where conscious staging of spaces is at play.

In combination, objects and spaces may contribute to the sensual appearance and ambience of design. Through their appearance, objects may radiate into space, and the ambience of the spatial setting may contribute to the staging of the perception of the objects. Designed objects may even be situated between object and space. Consider a product like *Algues*, a 2004 design from Ronan & Erwan Bouroullec in which a series of plastic elements resembling plants can be linked to create transparent, weblike room dividers (figure 3.3). In its plantlike structure, Algue (French for seaweed) is familiar with Vegetal.

Seen as a conscious approach to the framing of experience, design can be argued to be a central means for structuring how the sensual means of

Figure 3.3
Algues, 2004. Design by Ronan & Erwan Bouroullec. Photo credit: Vitra.

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objects—through appearance and ambience—create an artificial interface with the world, which in the end signifies what "world" is in our perception and cognition.

Conceptual Aesthetics

In the conceptual dimension of aesthetics, the interest shifts from sensual impact to the cognitive appeal to understanding. Here, artifacts (of all kind) are seen as media for a complex and often auto-referential construction of meaning and an evocation of new patterns of understanding. In relation to design, this means that the "concept" or the "idea" of the design is being reflected or problematized to challenge given outlooks on things. The sensual aesthetics may also consist of reflective elements, but whereas the role of perception may be reflected in sensual aesthetics, the kind of reflection at stake in conceptual aesthetics is the design object's qualities, for instance, in relation to its product type. Hereby, conceptual aesthetics leads us to investigate design objects for their ability to encourage to be met by a reflective understanding.

The conception of aesthetics as dealing with a reflective ability can be traced back to Kant's seminal work *Kritik der Urtheilskraft*. As discussed in chapter 1, Kant conceived of aesthetics as a basic aspect of epistemology bridging sensual appearance and conceptually formulated meaning.[14] In Kant, this bridging was transmitted by the experiences of the beautiful and the sublime, but later on it developed into a more general question of meaning construction without any association with beauty in the art-oriented aesthetic theory influenced by Kant, especially in a German-language context (e.g., Adorno 1970; Bubner 1989; Menke 1991, 2013; Seel 2000).

A key aspect of this line of aesthetic theory has been an immense interest in the extra- and trans-communicative effects of the aesthetic artifact beyond its normal communicative capacity. This interest goes beyond the artifact to explore the effect of communication but anchors the artifact as an integral element of the communication of the specific aesthetic medium. Aesthetic media are argued to be capable of a "Herstellung des Mehr" (Adorno 1970, 122), a production of something "more," which is not communicable or graspable by concepts but only possible in the sphere of the aesthetic medium. Consequently, the focus is not on the (cognitive) effects on

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subjects but on the role and capabilities of the specific aesthetic medium in question.

This approach to design aesthetics is not common, as debated in chapter 2. In previous theories, the ambition has been to describe what is specific about an aesthetics of and for design and, in turn, what differentiates it from other kinds of aesthetics, especially the aesthetics of art. In the larger picture, the sensual trend in design aesthetics has had the objective of liberating design from the dominating discourse of art, where design often has been regarded a lesser or impure form of art. No doubt, the liberation of design from art has been proper; design may draw on artistic means in relation to form, but in terms of function, operation, meaning, interaction, use, and impact, design is something quite different from art. Forsey's (2013a) analysis of the specifics of the aesthetics of design builds exactly on a differentiation of design from art as well as from craft, even if her proposal does not belong to the sensual trend of design aesthetics but to a clarification of the aesthetics of design from the perspective of analytical philosophy.

My claim is, however, that important insights about the specific aesthetics of design objects can be found also in the art-related aesthetics and that this claim has the advantage of challenging the close attachment of the concept of "aesthetics" with beauty, which often is the case in design. In doing so, my ambition is the opposite of (re)conceiving design-as-art. Instead, my proposal to explore and reconnect design aesthetics with the potential of a broader field of aesthetic theory as much as with aesthetic theory—with inspiration from Kant—deals with general questions of the complexity and communicative capabilities of the aesthetic medium.

In relation to the framing of experience by design objects on a conceptual level, the key questions are how and by what means design objects enable and construct meaning and appeal to understanding, and what the nature of this meaning is, for example, if it transcends any limitations, and what its implications are. Further, in the process of constructing meaning and appealing to understanding, design objects may encourage a reflection about them as sites of meaning construction. Thus, I will discuss next how this kind of aesthetic theory applies to design through two concepts which in different ways deal with meaning creation in the aesthetic medium, in this case design. Through the concept of *aesthetic reflection*, I will aim to show how a design object may encourage a reflection of its meaning, and

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through the concept of *aesthetic frames*, I will examine how the aesthetic medium (i.e., design) stages modes of understanding for its recipient and, in the broadest sense, ways of meeting the world.

Aesthetic Reflection

Within the discipline of linguistics, and in a continuation of Shklovsky's formalist concept of an enhanced perception, language has since the 1920s been claimed to possess the meta-communicative ability to reflect its own constitution as a vehicle of meaning as well as a container of a message. This has been formulated in terms of an "aesthetic function," for example, in the 1930s by linguist Jan Mukařovský (1979), who belonged to the so-called Prague School of Aesthetics. Later, famously, linguist Roman Jakobson (1960) labeled this the "poetic function" of language.

Visibility of the code Even if originally attached to language, this aspect of making the code of communication visible in the act of communication can be transferred to other media. In relation to design, design objects may direct the user's attention to themselves as objects of a certain category or type of design and hereby engage the user in a reflection of what the object is about. Reflection may be evoked by effects of "surprise" when outer appearance and material properties are combined in unexpected ways (Ludden, Schifferstein, and Hekkert, 2008)—for instance, in creating an expectation based on visual perception that is not met by tactile interaction. Objects whose function is difficult to determine, such as clocks hiding their clock function or kitchen utensils with overt ornamentation leading astray from function, may evoke such reflection.

One of the most written-about design objects is the citrus squeezer created by Philippe Starck in 1990. *Juicy Salif* for Alessi (figure 3.4) illustrates aesthetic reflection in relation to design. This citrus squeezer is not only aesthetically pleasing, in the common sense of being sensually appealing in its superb detailing, but invites interpretation as to its function. As a device, Juicy Salif squeezes citrus fruits, but it also, and perhaps even more (as it may not be that easy to use), presents an invitation for contemplative reflection. The Juicy Salif is not intended for habitual, nonreflective use as a citrus squeezer but attracts attention to its being as an object. In this way, the Juicy Salif is not only a citrus squeezer but also an object that challenges our understanding of it by encouraging reflection about its function and its object status as a citrus squeezer. Further, it may be argued that

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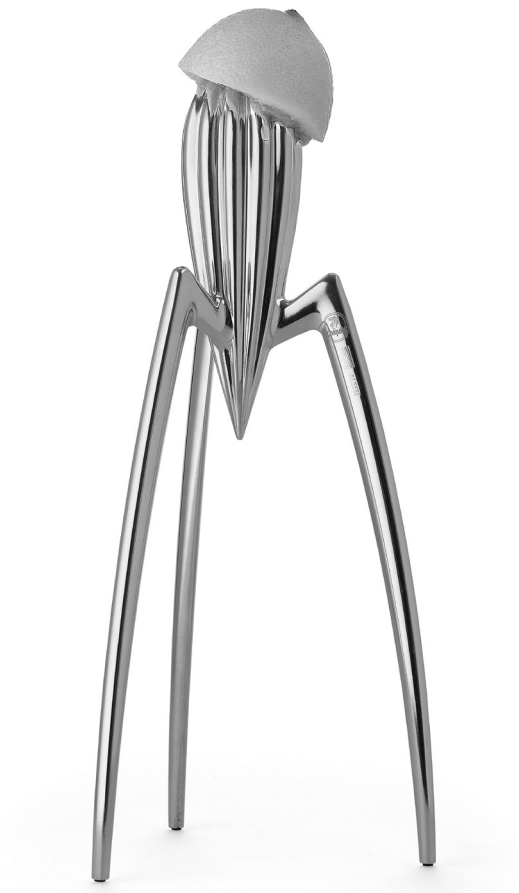

Figure 3.4
Juicy Salif citrus squeezer, 1990. Design by Philippe Starck for Alessi, Italy. Photo credit: Alessi Archive.

it problematizes this being as it is not obvious that it functions as a citrus squeezer. As an object positioned as "design" in the context of "design culture" (Julier 2014), the Juicy Salif provokes reflection about what an object of "design" is in terms of function, appearance, and consumer appeal. Of course, its sensual appearance may evoke a conceptual reflection about the work of the designer and/or the designer. Under the heading "craftmanship," Herriot (2022) points to the value of objects is to be designed "to look as well made as they can be" (120) hereby demonstrating "industrial design finesse" (136). Thus, by being well-designed and well-crafted, the Juicy Salif

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may evoke a reflection about its origin: the skills, and even virtuosity, of the company Alessi and the designer Philippe Starck in designing it.

The kind of reflectivity I am describing here is, furthermore, central in contemporary visual culture where, for instance, ads not only convey a message but also display and explore their code of communication (cf. Sturken and Cartwright 2009). The images not only transport some meaning but point also to their being and construction as images.

As an example, in its media ads, the company HAY stages its furniture items as sensually appealing design objects but also positions them in an image that clearly reflects their constitution as an image (figure 3.5). The furniture and its representation are no longer only about function and demonstrated potential use but also about a self-conscious creation of style. Objects and image are engaged in reflexive dialogue, rendering both as interdependent, as form that contributes to image and image mediating and verifying form. Thus, this aspect destroys the illusionary effect of the image yet creates a new kind of aesthetic experience by engaging the

Figure 3.5
Reflective presentation of furniture by HAY (2016, 57). Photo credit: HAY.

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viewer with the reflectivity of the image. Being a part of a contemporary media culture surrounding design, the HAY ad testifies to a tendency to let more and more design be created and positioned as aesthetic by being consciously constructed and reflected. Below, I will discuss this tendency in relation to "aestheticization."

Types of reflection In general, two distinct types of reflective strategies exist. First, design solutions may *explicitly* encourage a reflection on their status as sites of meaning construction (and not just being objects of use or transparent vehicles for different kinds of experiences). Examples can be found in the 1960s Italian Radical Design movement, deconstructive graphics of the 1990s, or the critical design movement of the 2000s. These examples demonstrate a reflection on design as a phenomenon of contemporary culture rather than only a means for a purpose.

On an *implicit* level, reflectivity in design may be seen in a relationship between the *physical manifestation* and the inherent *idea* of the design. The "idea" of the design object can be defined as an intended purpose, which often relates to, or is established by, a certain product type, such as "citrus squeezers" or "clocks."

This relationship between physical manifestation and idea may be direct, immediate, and unproblematic, where the physical manifestation directly points to and facilitates the idea, as is the case in much design of everyday life (e.g., when we easily can detect a citrus squeezer to be as such), or it may be indirect and mediate in the sense of the design solution having an intricate relationship between physical manifestation and idea (e.g., the Juicy Salif). In this way, the question can be raised about how design objects encourage a reflection about their being as solutions with a specific function and how they are special in their constitution.

Most objects, however, are not designed to problematize their being as design objects or their object category but to obtain a position on the market by being special. In this way, a smartphone with a high focus on materials, such as glass or aluminum, may encourage a reflection about the object as special or outstanding in the product category. Still, even the most habitual objects may contain the potential for encouraging aesthetic reflection—for instance, when people supplement their smartphones with colorful covers that sometimes contain non-purposeful elements such as fur or ears. This kind of treatment may indicate that the idea of smartphones is not just to

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be purposeful in interaction but, on this ground, also be an object that is being reflected as special as a "smartphone" in the actual appropriation by the user.

The reflection of "ideas" in the physical manifestation of design objects relates to Kant's notion of "reflective judgment" in *Kritik der Urtheilskraft* (see the discussion in chapter 1). Kant's point is to demonstrate that aesthetic media can employ a kind of conceptual reflection that starts from the sensual material and does not know its concept in advance, because it virtually is a meaning that exceeds human expression. In the history of aesthetics, the tradition from Schelling and Hegel to Adorno attached this kind of reflection to the work of art and asked how art could be a medium for otherwise impossible experiences, often through rather abstract concepts and in idealized and universalized notions of art (e.g., in Schelling's idea of experiencing the "absolute" through art). In modern aesthetic theory this aspect has been articulated through the question of how a work of art is constituted through a specific form that may or may not reveal its meaning or resists or challenges understanding (Adorno 1970; Bubner 1989).

The question is, then, how this notion relates to design. As rightly pointed out by Forsey (2013a, 148), judgments of design objects can never be totally without concepts, as in Kant's original notion of reflective judgments, because design objects qua purposeful always "include some amount of conceptual knowledge of the purposes we attribute to the objects we encounter." Design objects are not devoid of concepts in a way that could lead to radically new aesthetic experiences (or to an idealization as in Schelling or to an abyss of lack of meaning as in some modern art)[15] when we search for these concepts. What we can do, then, is to investigate the role of the founding concepts, the ideas, in the physical manifestation of design objects.

My proposal is to use the term *aesthetic coding* to conceptualize how ideas are present in design objects. Hereby, aesthetic coding deals with the matter of how design objects stage meaning and relate to their content of meaning—that is, their "idea." Thus, aesthetic coding does not only deal with the specific *content of meaning* (what the intended meaning of a specific design might be seen as a concept, its idea) but also with the question of its *specific constitution*: how the meaning is staged and how the design object encourages a reflection of this meaning through its actual presence and unfolding in a physical setting by means of sensual aspects of form, materials, and color, for example. Thus, what is the "idea"? How is it conveyed,

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and by what means? How does the design present itself to our understanding? Is it something that is easily comprehended or something that resists comprehension?

On this point, a spectrum of different aesthetic codings can be described. At the one end of the spectrum, anonymous design exists as a kind of design that is not intended to attract attention and where the idea is obvious in the object but not something to be noticed or necessarily reflected on. What the object is about has become habitual or is being conveyed by "affordances" (cf. Gibson 1977) in the object. At the other end of the spectrum, "auto-reflective" design encourages a reflection on the idea of the design, either by making a conceptual statement as in experimental design or by being present by being hard to decode. In this way, design objects may call for reflection by resisting decoding.[16] On this basis, aesthetic coding opens an examination of how design solutions can attract attention and appeal to the senses while being constituted in a way where they demand or even command a specific order of alignment or mode of understanding what the design is about.

Aesthetic Frames

On the level of aesthetic reflection, design objects may encourage one to reflect on their specifics—for instance, what characterizes a citrus squeezer?—and hereby challenge given understandings. This element of the conceptual aesthetics is directed toward a reflection on the objects and their characteristics. On a more abstract level, design objects may set the scene for new ways of experiencing and understanding the world. In this element of conceptual aesthetics, the objects are conceived as *aesthetic frames* for new ways of relating to the world and conditioning the experience of the world. This approach to aesthetics has a clearly epistemological component regarding how knowledge is facilitated, because the design objects function as frames for humans' access to and interpretation of the world. I will point to two explorations of objects as aesthetic frames for a new understanding, by Theodor W. Adorno and Martin Seel.

Meeting otherness In his influential book on art and aesthetics, *Ästhetische Theorie*, Adorno (1970) discusses art as a medium that is, paradoxically, inevitably bound to the reality of the given while at the same time having the potential to transcend the given and show new meaning potentials that might in the end prove subversive or utopian.[17] Art, thus, can be a

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medium, an aesthetic frame, for otherness. This transcendence is, of course, a paradox because it cannot in its constitution transcend the conditions of the given. Put another way, although art may encompass a configuration of the "other" of the given, it must always be based on the given. As Adorno says, "the non-being in the works of art is a constellation of being" (204).

In his book, Adorno seeks constantly to address this defining and, hence, unresolved paradox, which demonstrates a structure of the aesthetic medium where, through its own means, it stands constantly on the verge of something else, the "other," the negation of the given. Therefore, the work of art is not seen as a means of representation but as "apparition" (Adorno 1970, 130), which creates momentary traces of that which is not existing or not-yet-existing. The work of art can be a medium of the possible-to-come; it may indicate the illusionary character of the non-being and the possible. And yet it must always negate itself; this non-being can never rise to become being but can exist only within the negated frame of the work of art (cf. Iser 2003).

For Adorno (1970), the important question is how artworks can point to or incorporate a meaning that is radically otherness. Following this line of thought, Adorno sees art as a *Herstellung des Mehr*, a production of something "more," whereby the works of art "let themselves be actualized as appearances of expression" (126). Thus, art produces its own transcendence of meaning that is not directly represented by the work of art but comes to expression as an otherness (*ein Anderes*) paradoxically conveyed by and separated from the structure of the work of art, in the same way that the work of art is both connected and opposed to the material structures of society. Adorno points to the ability of works of art to contain aspects of graspable certainty and determination, as well as aspects of the opposite, the indeterminate, and thus enigmatic. In pointing to a truth that can never be directly expressed, he argues that works of art act as a "question mark" that indicates a direction as well as a disruption. According to Adorno, works of art can describe a figure that indicates a "passage in that direction . . . where the work of art breaks off" (188).[18] In this reflection, the added value of meaning resides outside the artwork, which then indirectly points to it and, in the same turn, demonstrates its impossibility as direct presence. However, the impossible meaning gains a sort of representation as the energy of the artwork is focused on a point outside its capacity as a medium.

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Much design, however, affirms the existing reality and does not contain or evoke an, in principle, radically disruptive otherness. But design objects may, as aesthetic frames, attempt to challenge what is given and existing understandings. In this way, some design is conceived to have the potential to break with existing patterns of meaning and to be disruptive, as design does within the critical design movement or design activism (cf. Markussen 2013). Other types of design may be disruptive in engaging the users to new types of interaction, such as how the introduction of a graphical user interface (computer interaction using visual icons instead of computer code) by Apple in the 1980s "changed forever the way people think of computers" (Atkinson 2014, 89).

Meeting meetings In moving the perspective from the possible otherness within artworks to the perception of otherness *through* artworks, philosopher Martin Seel (2000) offers a productive contribution to the conceptualization of aesthetic frames. He speaks of how art and other human creations[19] may establish new frames of understanding that serve as media for comprehending and meeting the world. In this way, Seel (2000, 184) is interested in the function of human perception in the process of confronting something "other," claiming that works of art may "bring forward otherwise unrepresentable circumstances." In his understanding, works of art have to do with

> ways of human commitment in the real or the unreal, in conditions of the world in the past, the present, or the future. Ways of *meeting the world* [*Weltbegegnung*] are put forward, whereby ways of *meeting the meeting of the world* [*Begegnung mit Weltbegegnung*] will be possible. (Seel 2000, 184, his italics)

When Seel talks of meeting the world and of meeting this meeting of the world, works of art do not present only experiences but also meta-experience—that is, the experience about what "experience" is. Furthermore, this process of ways of meeting the world is not tied to goal-oriented understanding but to a meeting outside the artwork in the human subjects themselves: "Objects of art are a medium for an experience that takes place as a process of an understanding that is not oriented towards a result of an understood. . . . Understanding art is more about an otherwise impossible meeting with otherwise impossible possibilities of perceiving ourselves" (Seel 2007, 38).[20]

Thus, aspects of nonunderstanding or incomprehensibility in artworks (and other objects) engage us in new understandings. Prisms for understanding, new ways of meeting the world, and, reflectively, of meeting this

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meeting are engaged, which enables new patterns of perception and understanding. Hereby, the objects operate as aesthetic frames for a new perception and understanding that transcends everyday conditions. In turn, this can lead to a new kind of seeing. Following Roger Scruton (1974, 115), this kind of seeing through an aesthetic medium is a controlled form of "seeing as" that focuses on specific aspects, consciously reflects this seeing, and points to an "unasserted thought" that is otherwise impossible outside the medium of art, the topic for Scruton's reflection. Scruton even claims that "the 'unasserted' nature of 'seeing as' dictates the structure of aesthetic experience" (120).

Unlike art, design objects are often not obviously self-reflective of their own being as creators of meeting points between us and the world or their capacity for making us see the world in new ways. Nevertheless, we can ask how design objects are conceived and operate as such. As objects of use, design objects have the effect of staging dynamic meetings with the world; that is, they produce a meeting with the world that may enable new kinds of meeting with the meeting of the world, to rephrase Seel.

We may see this kind of aesthetic framing come to expression in design in several ways. One way to stage a meeting with the world is through the interaction with the design object, not just in terms of how to handle a specific physical object but also in terms of how the object may respond and possibly alter its character in our interaction with it. Designers working with critical design have explored how digital technology affects the interaction between products and humans (Dunne 2005; Dunne and Raby 2013; Malpass 2017). The 2007 project Technological Dream Series (cf. Dunne and Raby 2013) explored how robots may not only be passive servants of humans but may be demanding or even needy in their requirement for interaction. As a human-made element of the world, technology is met in new ways in this example. An example of a marketed product operating by staging interaction is the Cube Click Clock (see figure 6.2), a simple alarm clock that reveals its function only when touched; otherwise, it appears as a simple block with an artificial wood finish.

In the conceptual dimension of aesthetics, design objects may operate as aesthetic frames for not only experiencing the world but also understanding what "world" is. Design objects may offer a staging of what "world" is. Thus, design objects may be aesthetic by challenging the habits of use, the way we understand an object (what is it for?), and the way we meet the

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world through the object. This meeting builds on sensuous effects but also on the creation of the object as an interface between us and the world.

Contextual Aesthetics

While the sensual and conceptual dimensions of aesthetics deal with meaning aspects of the design object, the contextual dimension of aesthetics focuses on the wider implications of the circulation of objects on a cultural, social, and political level and the ideological implication of how objects frame experience. Hereby, the contextual dimension of aesthetics is embedded within a cultural reflection as the surrounding cultural context may circumscribe what is defined and regarded as aesthetic.

On this point, the theoretical perspective changes from theories with a close focus on the character of the object as being aesthetic, often conceptualized within an analytical-ahistorical framework (such as the above sections), to theories dealing more broadly with the cultural contexts conditioning design of objects being positioned as "aesthetic." Ways of effectuating this may be found in branding strategies and in the cultural production of "media-environments" (Lash and Lury 2007, 9), where things turn into and are engulfed by media expressions in a manner where there is no outside as seen from the perspective of these environments; everything is ordered in new ways and delimited as a space of experience. From a perspective of consumption (and not just use situations), media contexts are active in framing aesthetic experience.

In principle, all kinds of cultural theories dealing with or having relevance for design may be of interest here. Of special interest, however, are theories dealing with aesthetics in a contextual perspective and the concept of aestheticization as cultural meta-level of aesthetics. Of the latter kind are the philosophical theories of Wolfgang Welsch (1990, 1996) and Ernst Oldemeyer (2008) and approaches from the social sciences by Mike Featherstone (1991) and Andreas Reckwitz (2015), to mention some that I will discuss below. Of the first kind can be mentioned the critical theory of commodity aesthetics (Haug 2009) and the philosophical trend of "everyday aesthetics" (e.g., Saito 2010, 2017; Leddy 2012).

In the following, I discuss aesthetics as a "distribution of sensible material" through the philosopher Jacques Rancière's (2004) aesthetic theory. On this basis, in the next section, I will introduce the concept of aestheticization,

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especially in the light of cultural history, and in conclusion, I will discuss different means and effects of aestheticization in relation to design. A part of understanding how design aesthetics can be historicized is the question of how aestheticization as meaning production in a cultural context produces new aesthetic categories. I will return to this idea in chapter 4.

Distribution of the Sensible

According to Rancière (2004), who has influenced the contextual trend in aesthetic theory through the work *La partage du sensible: Esthétique et politique* (translated into English as *The Politics of Aesthetics*), aesthetics can be investigated as a political power issue in relation to the distribution of sensory material. In his analysis, aesthetics is the ability to determine "what presents itself to sensory experience" and can thus be seen as "a delimitation of spaces and times, of the visible and the invisible, of speech and noise, that simultaneously determines the place and the stakes of politics as a form of experience" (13). Rancière positions aesthetics as political and ethical in the sense that it deals with the creation and distribution of sensual material and addresses how artistic practices, in their ways of doing and making, contribute to the "modes of being and forms of visibility" (13). On this basis, Rancière claims a new paradigm of aesthetics, different from Kantian aesthetics, which he introduces in this way:

> First of all, elaborating the very meaning that is designated by the term aesthetics . . . [this term] denotes neither art theory in general nor a theory that would consign art to its effects on sensibility. Aesthetics refers to the specific regime for identifying and reflecting on the arts: a mode of articulation between ways of doing and making, their corresponding forms of visibility, and possible ways of thinking about their relationships. (Rancière 2004, 10)

Hereby, Rancière seeks to discuss possibilities that are determined by aesthetic media; these media not only behave as transmitters of new possible meaning but also produce possibilities by defining and conditioning domains of the sensual experience.

This approach has a kinship with discourse analysis in the tradition of Michel Foucault (1969). The focus is on the organization of knowledge in discourse, which structures our access to knowledge. Discourse is organized according to mechanisms of control and regulation (not everything is always possible), while simultaneously acting as discontinuous practices without reference to a defining center. Thus, discursive knowledge is not

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fixed but constituted as becoming and explorative. In the same vein, Rancière's (2004) perspective on aesthetics does not only aim to scrutinize how aesthetic media produce possibilities in defining domains of the sensual experience. In their way of pointing to new modes of experience, that is, their acts of "distinguishing a sensual mode of being specific to artistic products" (22) and disseminating experiential knowledge, aesthetic media can promote a "recomposition of the landscape of the visible, a recomposition of the relationship between doing, making, being, seeing and saying." Thus, "artistic practices . . . represent and reconfigure the distribution of these activities" (45).

Distribution of Design

In this conception, aesthetic media, such as design, have the capacity to radically reconfigure and transfigure the territories of "the visible, the conceivable, and the possible" (Rancière 2004, 41) and propose possible models for accessing and experiencing the world in new ways. That design can be seen in this way as a means of conditioning experience is itself a political act in the perspective of Rancière's theory. For a long time, art has been privileged as a medium for investigating experience, but now the everyday medium of design can be conceptualized to give "new significance to the ordinary" and hereby "fundamentally [be] transforming our experience of the ordinary," to employ Ben Highmore's (2011, 51) formulation in his discussion of Rancière's theory. In an essay called "The Surface of Design," Rancière (2007) directly points out the application of his theory to design. In a historical perspective, he poses the question:

> how do the practice and idea of design, as they develop at the beginning of the twentieth century, redefine the place of artistic activities in the set of practices that configure the shared material world—the practices of creators of commodities, of those who arrange them in [a] shop window or put their images in catalogues; the practices of constructors of buildings or posters, who construct 'street furniture', but also of politicians who propose new forms of communities around . . . institutions, practices or facilities . . . ? (Rancière 2007, 91)

In reversing Rancière's question to a statement, Rancière claims that design can "configure the shared material world." That is, by various means, design is to be counted among the artistic practices that influence "what presents itself to sensory experience." By embedding his statement in the vocabulary of cultural studies in design, next, a variety of actors behind this process

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stands out: designers, manufacturers, retailers, marketers, journalists, and politicians, all taking part in the cultural circuit of design.

In a broad conception, Rancière claims that "aesthetics" has to do with the creation and distribution of sensory material and that what we can see to be "world" is the result of a structured access to knowledge and experience, which, in turn, is the result of power exerted by someone through artistic practices. Strictly speaking, this conception of aesthetics encompasses virtually all artistic creations (to which design here belongs).

Within this framework, however, we may ask how different materials are being created and positioned as "aesthetic," which is to say, in a more limited sense of the word meaning, how objects are made more appealing. With a starting point in Rancière's contextually oriented question of how aesthetic meaning comes into being, I will pose the question of how design objects are being positioned as "aesthetic" or being infused with aesthetic meaning. To this purpose, I will employ the concept of aestheticization, which I will deal with in a historical and systematical perspective, respectively.

Aestheticization

In the following, I will specify aestheticization in relation to design as a *cultural meta-level of aesthetics*. Aestheticization can be employed as a concept to describe the cultural process by which design is made or conceived of as aesthetic by factors that are often external to the concrete objects themselves. In a definition proposed by Wolfgang Welsch (1996, 21), aestheticization means "making non-aesthetic aesthetic or to be understood aesthetically." In relation to the framing of experience by aesthetic means, I point to aestheticization as a ubiquitous process of distributing sensual material in design with an emphasis on the impact of the aesthetic dimension on experience. The basic point is that the contextual aspect of aestheticization can promote a cultural construction of new conditions and new categories for the way we experience relevant meaning properties of design objects. The process of aestheticization is driven by the development of the uprising consumer society, where more and more sensual material is being staged, positioned, and praised as special and imbued with aesthetic meaning.

Importantly, aestheticization describes the moment in cultural history when calculated sensual appeal begins to gain in importance as a means of

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communicating a new world of goods to contemporary consumers. Thus, aestheticization has a history.

Aestheticization Historicized

From the beginning of the nineteenth century in the Western world, new ways of appealing to the senses through advertising have arisen, especially in Paris, labeled "the capital of the nineteenth century" by the cultural critic Walter Benjamin. Boundaries of high culture break down, as devices and form repertoires of art enter the experiential domain of everyday life, and new, calculated surfaces of visual appeal and imaginary simulation appear (cf. Featherstone 1991). In this process, a new material culture emerges. As pointed out by Celia Lury (1996, 26), "aestheticization of everyday life has provided changed conditions for the organization of material culture" and, hence, the conditions for how to approach and experience the world. At the same time, this aestheticization of everyday life comes to expression as an "*everyday-making of the aesthetic* [*Veralltäglichung des Ästhetischen*]" (Oldemeyer 2008, 44, his italics) and a continuous stimulation and modeling of the senses by many means.

In a sociological analysis of the relationship between aesthetics and societal conditions, Andreas Reckwitz (2015) points out that the segregation of aesthetic practices from the subsystems of art and beauty (hereby revealed as subsystems without broad societal impact) is less a spreading of these practices than a transformation of their structures and dynamic intermeshing. He describes three different stages in this process of aestheticization where what is "aesthetic" changes.

Initial aestheticization The *first* stage is the starting point of an "exclusive aestheticization" of the early bourgeois culture, where aesthetic media, mostly as art, form their own sphere, counter to the ongoing industrialization. In relation to design, a "free" counter sphere can be seen in the Arts and Crafts movement's claim of the importance of artistic means and the role of handicraft in opposition to industrial manufacture (cf. Reckwitz 2015, 35). In a perhaps too sharpened formulation, Wolfgang Welsch (1996, 54) points to the "beautifying aestheticization in the theories of the total work of art [Gesamtkunstwerk] and in the trends of Arts and Crafts, Werkbund, and Bauhaus," but his point is that these trends—and major achievements in the history of design—attempt to create their own sphere of aesthetic manifestations closely affiliated with art.

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Modern aestheticization On this background, the *second* stage of "inclusive aestheticization" evolves. According to Reckwitz (2015), starting out at the beginning of the twentieth century and running until the 1970s and 1980s, consumption and visual media replace art at the motor of aesthetic development. In this Fordist age, the epicenter shifts from Europe to the United States and is driven by a new middle class "which increasingly get meaning and satisfaction from consumption, which no longer is primarily directed towards use value, but on the symbolic-aesthetic value of things" (36). Retail and shopping spaces get increasingly arranged to appeal to these consumers, and "aesthetic consumption" becomes paramount, as formulated by the philosopher Ernst Oldemeyer (2008, 16). In a radical statement, he claims that "almost nothing else than aesthetic values come to expression in commodity and 'life style' advertising" (82). This development of the market is a matter of design and advertising and less of designers. In this way, design historian Penny Sparke (2013, 59) has pointed out that the "aestheticization of marketplace, one of the defining characteristics of modernity, had begun before the emergence of the industrial designer"; instead, it had been "achieved by countless artists who had created shop-window displays, exhibition stands and many types of advertising material."

Before getting to Reckwitz's third stage, I will delve into central aspects of the second stage as it has been conceptualized in several ways in the literature on the growing consumer society in the twentieth century clearly affiliated with modern design.

In focusing on the new image culture, Mike Featherstone has pointed out that the massive effect of "the displays, performances and spectacles of the urbanized fabric of daily life" entailed a "constant reworking of desires through images." "Hence the consumer society must not be regarded as only releasing a dominant materialism, for it also confronts people with dream-images which speak to desires, and aestheticize and derealize reality" (Featherstone 1991, 66–68). Following Jean Baudrillard's analysis of the effect of images in effacing the difference between image and reality, Featherstone analyzes the consequence to be the creation of a new, hyperreal, superficial, and "aestheticized" version of life, where aestheticization comprehends the "direct impressions, sensations and images of the consumer culture 'dream worlds'" (72). Featherstone attaches this new function of the image to the "postmodern" culture of the sign of the 1990s, where superficial signifiers circulate in an erasure of the sense of reality, and in this sense, his analysis

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points to our contemporary age. At the same time, however, his analysis is bound to traditional media such as advertising and TV, and for that reason I place his analysis of the image in Reckwitz's second stage.

Featherstone, along with Baudrillard, investigates this as a shift in the cultural condition and not necessarily as something to bemoan. In contrast, Guy Debord (2009) claims in his 1967 Marxist work *La société du spectacle* (*The Society of the Spectacle*) that all directly lived life in modern capitalist society is being inverted and transformed into illusionary representation by what he calls the "spectacle" (24). On this ground, Debord criticizes society for being "*fundamentally spectaclist*" (27, his italics), where meaning has turned into something imaginary and illusionary that threatens to take control and claim itself as reality and in this way mask the "real" reality. What is at stake is the epistemological power of images to evoke or efface reality. If we follow Debord's argument, images have the power to negate reality and to produce a counter-reality, something that also is acknowledged by Baudrillard (1989), for instance, in his reading of America as one comprehensive structure of images and his famous claim that the first "Gulf War did not take place," which, however, should not be seen as a denial of the fact that there had been a war, but rather that the media, in covering the war, created their own sphere of simulacra, making the real acts of war difficult to detect (Baudrillard 1995). Featherstone's claim is, though, more moderate, because his point is that images do not replace reality but play new and more active roles in interpreting reality and producing independent content contributing to reality.

In this stage of aestheticization, the surface and the sign aspect of commodities gain in importance. In his 1968 analysis of the system of objects in consumer society, accordingly, Baudrillard (2005) sees consumption not as a "material practice" but as a "*an activity of systematic manipulations of signs*," whereby objects on the market are positioned as signs in difference to other signs (218, his italics). Likewise, the semioticist Mario Perniola (1983) stresses how design, by being connotative and informational, turns into "narcissist objects," appealing for the consumers to mirror themselves in the objects.

To exemplify, *shininess* is increasingly being culturally produced as a seductive quality of products. In their informative study on *Shiny Things* in art and culture, Diepeveen and van Laar (2021, 9) point out that shininess instantaneously "comes at one as direct perceptual quality," which in its immediacy has a high effect but, by virtue of being constructed, always

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is mediated. They claim that "it is no mystery . . . that consumerism is so wild about shine: shine aids in commodification and in the fetishization of the commodity" (44). Until the twentieth century, "shiny things were typically rare and expensive" (10), but with modern design, new means and possibilities became available for "making things special" (12) and attributing cultural value to them through making them shiny. As part of modern consumer culture, shine also becomes "more technological, more mediated, more obviously cultural" (53), also letting objects appear more industrial, efficient, and impersonal.

As lucidly shown by design historian Nicolas P. Maffei (2013), the American steel industry aimed in like manner in the period after World War II to "sell gleam": to transform the perception of steel from being heavy, dirty, and old-fashioned to being a "bright, light and modern material" and, by the means of campaigns, highlighting "language and imagery of shininess . . . [to] conjure an attractive vision of modern consumer living" (304). In the same period, as demonstrated by design historian Tom Fisher (2013), plastics was explored as a malleable material offering new kinds of colorful, smooth, and shining surfaces.[21] In the view of Diepeveen and van Laar (2021), however, shining products risk becoming ambivalent. On the one hand, they make a promise of being special and precious, but on the other hand, they but lose value risking "authenticity" (37) when they become too ubiquitous and accessible (i.e., cheap). In addition, the easily accessible pleasures offered by shiny products may affiliate them with the "easy" pleasure of kitsch (175) or the ironic posture of "camp" putting kitsch to "ironic uses" (182). Plastics, in Fisher's analysis (2013), has in this way the double effect of being advanced and inauthentic at the same time. The ambivalence of shine only underlines that shininess is culturally produced in a double manner: as qualities of objects and as ways of perceiving them.

In a critical stance and directly relating to the concept of aesthetics, Wolfgang Fritz Haug focused on the surface element of consumer objects in his seminal 1971 book on the critique of commodity aesthetics, *Kritik der Warenästhetik* (see Haug 2009, republished with a book-length addition on the commodity aesthetics in "high-tech capitalism," thus actualizing the original 1971 analysis).[22] Haug looks at "beauty" as a "sensual appearance" that has an appealing effect on the senses and how this beauty is being "developed in the service of the realization of exchange and marked on the commodity in such a way so that the desire to possess is raised in the

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observer and he is urged to buying" (23). Building on Marxist theory, Haug criticizes the seductive power of capitalist economics that, in his understanding, comes to expression in the manipulated surfaces of goods and commercials, detracting attention from the basic value of use.[23] In addition, Haug's point is that we need to be critically aware that our sensory perception is being manipulated by and is changing because of glittering, shiny surfaces and media representations. Not only objects, media, and our immediate surroundings are being aestheticized, our senses are being affected, too.

In Reckwitz's (2015) stage of "inclusive aestheticization," aestheticization is established as a central aspect of modernity. Goods are not only on the market as useful objects but are designed and staged to evoke consumers' desires, often through aesthetic means appealing to the senses through surface qualities, styling, shop displays, and advertising. In this stage, in addition, art is defined in a new way. While art in the first stage of aestheticization was at the core of defining a sphere of the aesthetic, art in the second phase gets separated from the major stream of aestheticization. The field and institution of art is being defined as avant-garde, autonomous, and "as an antipode to the criticized aestheticization of mass culture" (Reckwitz 2015, 37). If design in its early years had a close affiliation to art as a form of applied art, the process of aestheticization creates a situation where design and art go separate ways. Art gets more complex, reflexive, and introvert in being turned toward itself, and design gets more simplified, focused on surfaces, and extrovert in its appeal to market logics.

Late-modern aestheticization In Reckwitz's (2015) *third* stage, the circulation of "signs, subjects, and artifacts" accelerates in an "active and productive aestheticization" (38). Reckwitz points out two new structural conditions for the new production and positioning of aesthetic meaning.

First, the economics and mode of production turn into a cultural production of signs, images, sensual perceptions, and experiences, and, as a part of this turn, the notion of creative work arises. The consumer gets activated as a someone who can create their own lifestyle by eclectic and creative consumption. In the condition of a "culturalization of economics" and "aesthetic capitalism" (cf. also Böhme 2016), aestheticization becomes omnipresent and circular in processes of production and consumption: Everything can be produced and consumed regarding its aesthetic appeal. As pointed out in an empirical study of consumption of earphones in Hong Kong (Lam, Liu, and Lam 2016), aesthetic experiences of objects may

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be pivotal in "consumers' identity formation and personal meaning creation" (432). For the consumers in this study, the aesthetic experience of the earphones gains in symbolic importance when "the design engages the consumers into actively taking part in experiencing the design with their imagination immersed in the creation of aestheticization of everyday life" (440). In this process, consumers are more focused on their own individual aesthetic experiences than on social positioning due to taste.

Second, digital media start to dominate in what is termed a revolution of digital media. Digital media, such as the Internet from the 1990s and social networks from the 2000s, have created new modes of producing, circulating, and consuming signs and images to an extent never seen before. Especially facilitated by mobile, wirelessly connected devices such as the smartphone (see also the discussion in chapter 6), images and signs are omnipresent, easily accessible, and exchanged at an increasing speed. Most important, these media facilitate a reciprocity in communication where users also produce content. The "old" media of one-way communication, such as advertising, movies, and TV, still exist, but digital media set radically different conditions for creating and circulating images. Companies are not the only actors to produce images of their products, so are the consumers, and on social media such as Instagram used for exchanging images and short videos, companies and consumers can even repost each other's images and bring them to new circulation. For Reckwitz (2015, 41), the advent of digital media is a part of a process of aestheticization intended to "motivate subjects to participation and to legitimize themselves."

The digital revolution is, obviously, not incorporated in the canonical literature on consumption and the consumer society of the 1960s to the 1990s (e.g., Baudrillard 1998; Leiss, Kline, and Jhally 1986; McCracken 1988; Lury 1996) but is central in this context because it provides new conditions for the articulation of consumption. Almost as if anticipated by Baudrillard's (2009) theory of simulation and the hyperreal, the stream and circulation in digital images have created their own sphere of staged, manipulated, glittering, and perfected images. Digitization has accelerated the process of unrealization (based on the capability of the image to negate the object that it is an object of),[24] which the images have undergone to exist in a detachment from the world beyond the images. The result is a highly aestheticized and aestheticizing sphere of images creating ever new polished and glittering surfaces of consumer goods (hence, Haug's 2009 actualization of his

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focus on commodity aesthetics may still be highly relevant), produced not only by companies (or the "capital") but by consumers.

Following the hasthtag #idealofsweden for the smartphone accessory company by the same name, more images made by consumers appear than images produced by the company.[25] In this case, consumers adapt and reproduce visual strategies initiated by the company in the form of consumer selfies in specific postures. As argued by the design historian Anders V. Munch (2017), the prevalence of images and, accordingly, an increasing visual consumption may lead companies in the opposite direction to create actual spaces (e.g., showrooms or flagship stores) to let consumers have a bodily, "close encounter" with the products. Whether these spaces offer a more "real" experience, however, may be contested, as showrooms and flagship stores also offer a highly aestheticized space.

In sum, the result of the different stages of aestheticization seems to be ever more encapsulating and mediated forms of aestheticization. Surfaces increasingly get designed to attract attention, different techniques to stage and display products may underline the appeal to the senses, and media get more dominant in framing and circulating aestheticizing images of products. Following this line of thought (and Reckwitz's stages), aestheticization is a dominant cultural logic with the contributions of manufacturers as well as consumers, almost on the verge of encompassing all aspects of design in the staging and communication of products on the market. Of course, processes of aestheticization may be varied, have different intensities, and operate by various means. To conclude this section on aestheticization and the chapter as such, I will discuss various means to aestheticize design and the effects they have.

Means and Effects of Aestheticization in Design

In the contextual approach to design aesthetics, aestheticization is a matter of how the sensible is being distributed and framed in order to appear as "aesthetic" and whether the aesthetic is regarded as a special (sensual) quality of the objects or as a special mode of perceiving them. The question now becomes how design is being aestheticized, what the effect is on the design objects, and further, what this means for the being of design as a way of meeting and experiencing the world.[26]

Design is being aestheticized in multiple ways: in media, in retail spaces such as shops and shopping malls, and in museums, just to mention a few

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contextual conditions or sites. A complete list of mechanisms of aestheticization in design is impossible. To structure the discussion, I will relate to a distinction made by Wolfgang Welsch (1996) between surface aestheticization ("Oberflächenästhetisierung") and deep aestheticization ("Tiefenästhetisierung"). This distinction is helpful for understanding not only how design is being aestheticized but also what the effects are.

Roughly speaking, surface aestheticization characterizes the work and focuses on the appearances of things in a "sugar coating of reality" through beautification and appeal to the senses (Welsch 1996, 11). In Welsch's analysis, the result is a superficial aesthetics closely affiliated with an economic drive in advertising and creation of lifestyles. In contrast, more layers of deep aestheticization may be in play. First, he points to the aesthetic formation not only of surfaces but also of the structure and kernel of the material to be formed, such as the technological material of the design. At the time of his writing, computer-aided design (CAD) was being employed (15), but today it would be digital technologies having an effect on the creation and ontology of design objects. Next, Welsch speaks of "epistemological aestheticization" affecting "our categories of recognition and reality" (45). Welsch's central argument is that all human creation (not only art and, thus, not only design) in its dynamic character contributes to the creation of reality ("Wirklichkeitserzeugung," 52). What is being aestheticized is not only things, forms, and surfaces but also the perception of the reality and the "structure of our understanding of reality [preceding] all form-giving [Gestaltung]" (54). In this perception, the world is seen as "made, changeable, non-committal and free-floating" (21). By proposing a double view of aestheticization, as related to the "creation of reality" and the "understanding of reality" (142), Welsch combines cultural analysis of contemporary appearances with philosophical aesthetics.

On this basis, I will point out a double structure in the aestheticization of design. On the one hand, design and its appearances are being aestheticized in different ways and by different means—for instance, in media and by museums, which on the surface position design as "aesthetic" in new or different ways. On the other hand, the effect of aestheticization reaches beyond the surface of design in a cultural production of new conditions for experiencing relevant meaning properties of design objects. In this process, new ways of seeing and understanding the world through design may be evoked. I will discuss this double structure in three examples that, on

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the one hand, point out some contextual conditions of design and, on the other hand, discuss the effect on design and its operation as a frame for experiencing the world.

Actors and institutions Actors and institutions are active in aestheticizing design. They can exert power to ascribe something a certain meaning. The concept of institutionalization is well integrated in art theory (e.g., Dickie 1974), where it describes the fact that what defines "art" is not only is foremost internal, ontological properties of objects but also external factors of power exerted by an "artworld" consisting of, among others, artists, galleries, and museums. The first and probably most famous example in art history is *Fountain*, a porcelain urinal that Marcel Duchamp signed "R. Mutt" and submitted to a censored art exhibition in New York in 1917. Since Duchamp's "readymade"—that is, an object retrieved from everyday life and then placed into an art context—it has been clear that institutions have massive influence defining what art is, especially when no clear conventions exist for what art is, which has been the situation for the artworld during the whole twentieth century.

In relation to design, a similar and paradigmatic example is the 1934 *Machine Art* exhibition at the Museum of Modern Art (MoMA) in New York, where industrial machine parts were exhibited in displays with the focus on their form, as if they were art and discursively ascribed meaning as "art." In this case, not the things themselves are being aestheticized but the *perception* of them. The method of the exhibition to decontextualize the items, a method seen in many later design exhibitions, places a focus on the sensual qualities of the objects (e.g., form and texture but probably not the smell of, say, oil in the case of machine parts), not their function or use situation. In this instance, the institution of the museum operates as a means of creating a special aesthetic perception of the objects. A particularity of this institutionalization is to ascribe design objects the qualities of *art*, which is a mode of operation shared by many museums affiliated with design, especially those directly related to art (e.g., MoMA) or having a history as museums of arts and crafts (e.g., Design Museum Denmark in Copenhagen), and less the case with newer museums born as design museums (e.g., the Design Museum in London) (see Michaëlis 2016). Often, the aestheticization of design-as-art is complemented by a tendency to elevate the exhibited items in a "distancing from the vulgar-sensual, a rise to a higher form of the sensual" (Welsch 1996, 25). In this process, the designer

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is often positioned as an artist, as a creative genius behind the material manifestation of the design objects. Exhibitions organized around the work of famous designers are legion (e.g., in a Danish context, designers such as Arne Jacobsen and Verner Panton). However, what is remarkable in the Machine Art exhibition is that it deals with anonymous, non-designer design. It is basically industrial machine parts exhibited as if they were art pieces.

Not only museums aestheticize by institutionalization, even if they clearly do so as special places for having special, "elevated" experiences. Different actors in the cultural circuit of design, such as designers, manufacturers, retailers, magazines, and influencers, may exert power and employ the term "aesthetic"—or implicit conceptions of it—in relation to the design object in question and install a perception of the object as aesthetic. Interior design magazines may be a further example. In photo shoots in the Danish magazine *Bo Bedre*, we meet systematic tendencies to display, position, and verbalize furniture items, often of historical provenience (cf. Hadberg 2019), as objects with qualities in form and expression and as objects

En enlig birkestamme giver et pust af natur ved det store spisebord i køkkenet. Det blev der plads til, efter familien har indraget pladsen fra et lille værelse til spisekøkkenet, hvor familien hygger sig med de fleste måltider. Catifa-stolene fra Arper er gjort mere magelige med blødt lammeskind i. Lamperne over bordet er fra Luceplan.
108 BO BEDRE Nr. 4 2012
I LYSETS VOLD
Det store, lyse køkken er indrettet med elementer fra HTH, og har fået en næsten 7 meter lang snedkerlavet bordplade i massiv hvidvasket eg. En enkelt væg er malet jordfarvet som kontrast til det meget lyse køkken. Tina Havmøller har selv blandet farven og kalder den våd mudder. Det er en Flügger-farve med farvekoden 5355, iblandet mere grå. Udvalgte fine sager, keramik og fine familiefotografier hygger på de åbne hylder. Til højre på køkkenbordet står en holder til støbte lys. 1. Lige fra første skridt ind i lejlighedens entré, fornemmer man, hvordan lyset vælter ind. I loftet hænger en skal-lampe fra Casa Casino. 2. og 3. Den varme grå-brune farve giver en fin kontrast til det hvidskurede køkken, og de ting, der står fremme på køkkenbord og hylder, tager sig smukt ud mod den grå nuance. Arbejdshjørnet i køkkenet er indrettet med hvidevarer fra Smeg, den lille sorte skammel er et arvestykke.
1
2
3
Nr. X 2011 BO BEDRE 109

Figure 3.6
Photo shoot from the magazine *Bo Bedre* (edition 4, 2012, 108–109).

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imbued with aesthetic meaning to be perceived across times (cf. figure 3.6). Furthermore, aesthetics is verbalized in popular ways—imprecise but with huge impact—in phrases such as "pure aesthetics." Thus, "aesthetics" is used as a general term as if it were conceived as the same across cultures and times while, in this usage and context, it refers to a modernist ideal of the pure and simple, often in rather empty white cube settings. The tendency to popularize aesthetics, which at the same time is an institutionalization by effect in the interior design magazine, can be found in contradictory phrases such as "æstetisk hygge" or aesthetic coziness. It also becomes clear that the word "aesthetic" has different semantic contexts, ranging from the academic to the practice-professional to the popular-cultural.

Investigating aestheticization-through-institutionalization, the point is that we must look for the cultural construction of design as aesthetic in contexts of production, consumption, and actors in relation to design. So, we look at design as something that is attributed and imbued with a kind of meaning that is labeled "aesthetic" and created and positioned in discourse as "aesthetic" and, further, how this produces not only the design but also the perception of design, to be "aesthetic."

The expansion of design and the extension of the aesthetic A tenet in the theories on aestheticization is the increasing arrangement and design of things and surfaces to appeal to an aesthetic perception. Hereby, aestheticization designates a high degree of aesthetic coding in our everyday surroundings and the transmission of this process through specific media. In the cultural process of aestheticization, the aesthetic has irreversibly expanded from the domain of art to all kinds of everyday appearances.

Design is everywhere, and the fact that it constantly enters and pervades new areas of our everyday surroundings (however diverse they may be)—from the interiors of houses and staging of urban cityscapes to small electronic devices such as smartphones and tablet computers—is not only evidence of the creation of a particular domain of artificial form and appearance in the realm of advertising or commercial goods; rather, it is a structural change in the general appearance of the world and its organization of meaning. Tablet computers, for example, are vehicles of aestheticization, not because they contribute to the creation of the overall number of beautiful forms in the world (even if a company like Apple might think that its products do that) but because, following Rancière, they "determine what presents itself to sensory experience" when they serve as an interface

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for experiencing (aspects of) the world and become devices for a discursive structuring of knowledge and through this process enable and condition experience.

In relation to the sensory appeal of design, though, aestheticization calls for a strong focus on sensual effects, even to the degree of overwhelming calculation where everything from products to interiors and whole environments, physical as well virtual, is designed to have maximum impact on the senses. At the most extreme, theme parks operate with whole, encapsulating environments with, in principle, no "outside." And, to take a digital example, virtual reality is an effective way to create a totally calculated environment. This aspect of aestheticization following the rise of consumer culture from the late nineteenth century and onward is testified in contemporary design culture as strategies increasingly to stage design objects and brands as sensually appealing in different kinds of commercial settings and displays, such as flagship stores, with a thorough calculated staging of the products of the brand in question. In a cultural-critical perspective, the reverse side of this kind of aesthetics has been described by Welsch (1990) as the stupefying effect of being *an-aesthetic*, a state of being where the "elementary condition of the aesthetic, the ability to feel, has been negated" (10). In this conception, the an-aesthetic ranges from the "zero phenomenon to the hyper phenomenon of the aesthetic" (11), which is when aesthetics runs the risk of becoming either too little or too much. Welsch's (1996) constructive answer against the "total aestheticization" or the "hyper aestheticization" is to propose a sensibility toward "differences and exclusions—and this not only in relation to forms of art and form-giving, but even so in everyday life and towards social life forms" (58).

Welsch is right on this point. Too much of a vast, undifferentiated aesthetic material would numb the senses and blur the perception of the specificity of appearances. But the extension of aestheticization varies. In highly controlled settings, such as retail spaces, of which the flagship store (typically with much space for one brand) is a special kind, or visual media, aestheticization may be at stake to a high degree. In contrast, not all surroundings are being encapsulated by aesthetics and strategies of aestheticization. Instead of being caught in a "whirl of aestheticization," which also Welsch warns against (1996, 57), we can contest *strategies of coding* in aestheticization on the different levels of aesthetics and investigate how it relates to experience.

Hereby, the discussion of aestheticization leads to an investigation of how the interface through which we meet the world is changing as a result

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of strategies for making objects and surfaces more aesthetically coded and asking how this process affects the conditions of experience. To enter an IKEA warehouse is to enter a sphere of sensual impressions *and* to be nudged to notice and possibly appreciate the specific arrangements in the apartmentlike settings of the warehouse. Not only is the stuff arranged, but so is the perception of it. Seemingly, however, a circular argumentation is at play. When objects and surfaces are aesthetically coded, they also frame our way of perceiving and experiencing them whereby we only focus on the aesthetic qualities. But if aesthetics is not everything and does not encapsulate our whole access to the world and instead is a specific, often intended way of approaching and seeing the world, then the analysis can reveal how design objects are being aestheticized and which consequences this process has, epistemologically, for our understanding of them.

What is important in this instance, then, is not only the focus on the sensual dimension of aesthetics, even if it may seem dominant in the prevalent sensescapes of design. The conceptual dimension of aesthetics is important to have in the picture. Today, we do not only have *more* design with a high degree of sensual calculation, but we also have design in a more *conscious* way: design being marked or staged as "design" or through a discourse of design as something special. In this way, IKEA not only creates a sensually effective setting of design in its warehouses but also a discursive framing of "design" through the concept of "Democratic Design": "We feel that good design combines form, function, quality, sustainability at a low price. We call it 'Democratic Design' because we believe good home furnishing is for everyone" (IKEA 2019).[27]

In a general reflection, aestheticization regarding the conceptual dimension of design can be seen in the tendency to consciously reflect design as "design" or to position design as a self-reflective medium, whether this implies an explicit debate on its conditions as a medium, as seen in art-related attempts to create reflective design (Radical Design, critical design), or simply positions "design" to be special. The position to be direct critical by means of design may, however, be a marginal position. Leading activists of critical design, Anthony Dunne and Fiona Raby (2013), have pointed out that the commercialization and integration of design "into the neoliberal model of capitalism" during the 1980s only have given little space for design to take "alternative roles" (6–7). But what has happened instead, then, is that design has become pervasive in societies. We may have less design taking on a critical role as artlike "works of design" (von Oppeln

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2011), but we have in total *more* design and more design playing different roles. Today, critical (or rather reflective) strategies are also being subsumed by the commercially driven aestheticization of design. On this level of aesthetic meaning, aestheticization is part of a cultural logic of not just creating forms for sensual appeal to experience but also reflectively positioning them as such.

As a consequence, the expansion of design to many areas of modern life has several effects. Design is not only being aestheticized to have increasing effects on our sensual perception in a way where we learn (or even are forced) to engage in an aesthetic perception when we meet design, but the increasing acknowledgment and discursive positioning of design as an agent or means of (positive) change produces a different kind of aestheticization of design as a medium for reflection and production of new experiences.

Aestheticized ontology A discussion in the literature on aestheticization is what happens to the "reality" of the world when its appearances are aestheticized. The question is whether the prevalent aestheticization produces an effect of simulation that creates new unreal (counter) images of reality, and if so, what the consequence is.

The effect of simulation can be seen in many types of media representations in relation to design where the real objects are negated by the images in a process of unrealization and material de-ontologization that enable the images to modify and recirculate the (images of the) objects in new ways.[28] An example is a visual mediation of the Vegetal chair in a three-minute film made by the designers (AbitareWeb 2009). In the film, the viewer is offered an abstracted version of the becoming of the chair by following lines of watercolor paint that eventually are structured as the pattern of the chair and turn into the final form of the chair. The film produces a sequential simulation of the chair as pure form and, related to this, as pure image. Further examples are legion and have massively increased with the digital media revolution, especially with social media providing new means for designers, manufacturers, and consumers to produce and circulate images.

The question is what this kind of de-ontologization of the materiality of the objects means for the status of the objects and how they are perceived. Does this effect of aestheticization result in the creation of superficial simulated meaning that precludes access to a "more real" reality behind the appearances? Often, critical analyses of aestheticization attempt to look behind it. In his analysis of *Alltagsästhetisierung*, everyday aestheticization,

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the philosopher Ernst Oldemeyer (2008) sees the world of appearance of aestheticization, *Scheinwelt der Alltagsästhetisierung*, which he sees as subsequent to and a consequence of the aesthetic strategies surrounding goods, *Warenästhetisierung*, in opposition to the "actual lived life of most people" (24). Thus, the premises of this approach are that we have the critical and analytical capability to separate the real from the fake, reality from the world of appearances, much in the same way as Haug attempts to get a critical understanding of the commodity aesthetics of goods.

Instead of claiming a complete ontological separation of simulation and "real reality," I will focus on the epistemological effects of the de-ontologization through aestheticization. What effect does it have for our perception and understanding of the objects that they obtain a new being through aestheticizing visual representations?

By being de-ontologized, the objects lose weight, physical extension and stability, and fixation in a concrete space. Accordingly, they become flexible, alterable, movable, light, and, possibly temporal in their changeable being. Through this new ontology, further, the objects may be elevated and set in new contexts that ascribe new meaning to them. Through the process de-ontologization, the virtual as an aesthetic characteristic becomes dominant and a new perception of reality is enabled because, in Welsch's (1996) words, virtuality "characterizes a specific perception of the world which takes place at that point where the aesthetic view is made to be the central model [Leitmodell] of the relationship to the real" (34). When things in aestheticizing visual media lose their weight and become part of "the aesthetic world [which] conveys in the whole an impression of lightness, changeability, and hovering [Schweben]" (35), we are encouraged to perceive them as such: light, changeable, *in der Schwebe*. In aestheticizing media, it is "as if all matter [Stoff] has changed into a sovereign play of forms" (Liessmann 2010, 19), and we learn to appreciate the form and not, necessarily, pose questions about the matter or about any (problematic) aspects of production.

Furthermore, the flexibility and instability of objects in aestheticizing media provides a stronger emphasis on the media as vehicles for framing a perception of them. Boldly stated, the objects themselves lose in importance, and the *ways of seeing* them gains in importance. Under the heading "media aesthetics," media studies have focused on the ways media frame and organize human perception (cf. Schweppenhäuser 2016). In chapter 7, I will further discuss the role of media, but for now I want to emphasize that

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what they produce in their contextual setting is an aestheticizing perception, where the objects are framed as aesthetic. The vehicles for doing so are the aesthetic categories that determine what is regarded as aesthetic and hereby condition the experience of the objects. In chapter 4, I will delve into details about the role and historical character of aesthetic categories.

Provocative advertising from the German cola company fritz-kola may serve as an example. Often, the (de-ontologized) cola product is presented on a black background accompanied by inciting slogans such as "koksen ist achtziger" (doing cocaine is so 1980s) (figure 3.7), used from 2006 to this day in selected places, or the more recent "kleiner pieks, große freiheit" (a small sting, big freedom) (figure 3.8). The brand and the campaign steer our perception and delimit our space and frame of experience (effects of pleasure or of being affected are vital, and everything is black). The company actively aims to create the aesthetic frame through which the product is to be evaluated. In the visual language of commercials and in its communication on social media and in outdoor advertising, the company aims to actively define cultural parameters and hereby establish ways of perceiving the product, its style, and its reflective positioning. Through its reflectivity, fritz-kola produces an aesthetic category that is perceived as *interesting*, which frames experience as temporal-anticipatory, where something is going to happen (for more on this category, see Ngai 2012). Thus, in de-ontologizing and abstracting the product, fritz-kola creates a structure of meaning around its product that produces the categories for how we can perceive the meaning of the product and, related to this, the relationship between the brand (as a vehicle for consumers to engage actively with) and the overall context of contemporary culture.

Thus, in this approach, the focus is not so much on the creation of hyperreal meaning through media, which will always be at a distance to something more real or authentic, but more on the *framing of experience*. This relates to the overall operation of aestheticization. In general terms, aestheticization on the level of contextual aesthetics inaugurates a cultural production of new conditions for experiencing aesthetic meaning properties of design objects, sensually, conceptually, and in effect, epistemologically.

Sensual, Conceptual, Contextual

This chapter has proposed a framework for design aesthetics in relation to the overall question of the book: *How does design frame experience*? It has

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Figure 3.7
fritz-kola ad. The provocative slogan and advertisement inaugurated the image campaign of fritz-kola company and has been in use since 2006.

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Figure 3.8
fritz-kola ad. Following the growth of the fritz-kola brand, company slogans have been tempered like in this ad from 2021 but are still provocative in their tone.

looked at aesthetics in terms of (a) the sensual appeal of design, (b) design objects as aesthetic media that frame modes of understanding, and (c) contextual factors such as media, distributing sensual meaning, and determining what is regarded as aesthetic. In doing so, design aesthetics has been employed to differentiate between three specific ways in which design frames our experience. We can look at sensual, conceptual, and contextual aesthetic dimensions of design and their contribution to the framing of experience—that is, how different dimensions of meaning articulation in design offer different framings of the experiences promoted by design objects and solutions. Today, design is not a question of things being beautiful but of the production of meaning and new ways of framing experience.

What is important to acknowledge is the role of the cultural context in defining what is made available for our experience and how the material for experience is staged in different ways as aesthetic. In this way, a central insight is that the aesthetics of design not only is determined by inherent qualities of the objects themselves but also by external, contextual factors. Aestheticization promotes a view of the cultural construction of new conditions and new categories for how we experience aesthetic meaning properties of design objects. How aesthetic categories frame what is regarded as aesthetic and how these have changed is the topic for chapter 4.

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4 Aesthetic Experience in Design

In chapter 3, I introduced different approaches to conceptualizing *aesthetics as a general theory of how design frames* experience. Design objects operate as sensual access points to the world, they can conceptually challenge what they are about or what "design" is about as part of this world, and they are part of a cultural context that contains a political power issue of what is sensible and attributes meaning to the objects.

In this chapter, I will examine *how aesthetic experiences of design may vary* because of cultural and historical contextualization.[1] New conditions for the distribution of cultural meaning are being created, which also affect the constitution of aesthetic experiences. More precisely, I will examine what characterizes contemporary aesthetic experiences of design and how the conception of what is aesthetic has changed from being bound to an implicit but rarely stated notion of beauty to a variety of (even conflictual) notions of artistic reflection, formal quality, or sign value. To acknowledge the sensual or conceptual dimension of aesthetics does not, in rough, necessarily lead to an appreciation of something as beautiful (cf. the analytical line of philosophical aesthetics in Parsons and Carlson 2008; Forsey 2013a) or to its positive complement in a feeling of pleasure, as claimed by practice-related research in projects such as the Unified Model of Aesthetics (UMA 2017), but to more mixed and differentiated sensual and conceptual responses.

To approach the question of contemporary aesthetic experiences in design, a meeting of philosophical reflection and cultural-historical contextualization is required. On the one hand, philosophical discourse is pivotal for articulating and understanding how aesthetic meaning comes into being. Philosophical aesthetics provides a framework for describing, among other topics, the ontology of aesthetic objects and the location of the aesthetic in an interchange of objective reality and subjective response

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(cf. chapters 1 and 3). On the other hand, cultural-historical contextualization is required to understand changed ideologies of what is important to acknowledge and emphasize in design and changed conditions of the production, circulation, and consumption of aesthetic meaning, whether in the form of artworks and design objects or commercial settings in, for instance, advertising. What is regarded to be "aesthetic" and to be the site of aesthetic experience has changed during the last 150 years from being intimately attached to art to entering the sphere of everyday life and mass culture.

Embedded in these two approaches is the question of whether aesthetic experiences are a given per se or change as a result of the changed conditions. Further, the question can be raised how aesthetic experiences depend on the new object culture of design. Still, art is the focus for much aesthetic theory, but in having a massive impact on people's lives, design requires attention. With the trend in aesthetic theories to focus on everyday life, art may even seem a marginal phenomenon. Surely, your perception of the world may change by reading Marcel Proust's *À la recherche du temps perdu*, but this change takes place only in an internalized dialogue between the work and the individual reader, whereas design operates in an intersubjective setting on a massive scale. In this regard, design expands the field of aesthetic appearances while at the same time putting at stake what character aesthetic experiences may have in the contemporary age of globalization, mediatization, and a new culture of transformed objects.

On this basis, the chapter will consist of two parts, a philosophical-analytical and a contextual-historical part. In the philosophical-analytical part, I deal with the central concept of "aesthetic experience" and its components of judgment and the aesthetic categories that frame the judgments. On this basis, the contextual-historical part gives way for a reflection of different emphases on, for instance, beauty, artlike quality, modernist purity, and surface qualities in the history of design as categorical framings for the aesthetic experience of design.

Using a concrete example, the chapter compares two lamps: the famous WG24 "Wagenfeld lamp," designed by Wilhelm Wagenfeld and Karl J. Jucker in 1924 in the context of the Bauhaus school and still in production (figure 4.1), and the FollowMe portable lamp designed by the industrial designer Inma Bermúdez in 2014 for the Spanish company Marset (figure 4.2). By relating to the lamps along the theoretical and historical

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Figure 4.1
Wagenfeld lamp. Design by Wilhelm Wagenfeld and Karl J. Jucker, 1924. This model was purchased by me in 2004. Author's photo.

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Figure 4.2
FollowMe. Design by Inma Bermúdez, 2014. Manufactured by Marset. Photo credit: Marset.

discussions, I aim to demonstrate how sensual, conceptual, and contextual aspects of the design objects play different roles at different times.

The two lamps share an outer feature, a rounded shade, but differ on several points. The WG24 lamp is made, foremost, of glass and steel, while the dominant materials in the FollowMe are plastics and wood. More importantly for my purpose, the two lamps are created in different contexts. With its clear, geometrical forms, its use of the modern materials of glass and steel, and its transparency of structure and assembly, the WG24 was conceived to be a direct reflection of a new industrial aesthetics in the period of the Bauhaus. Paradoxically, however, the lamp was impossible to

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manufacture industrially but requires handicraft and precision in glasswork and assembly.

Similarly, the FollowMe lamp reflects its formative conditions. Technically, it is advanced in employing a build-in rechargeable battery and low-energy LED light source adjustable at different degrees; contextually, it relates to a culture of mobility and flexibility of use; and, in terms of media contexts, it is meant to be photographed and mediated in multiple channels, regardless of whether by the company or by consumers. WG24 may have been a highly mediated lamp, represented in many design books, but the FollowMe lamp is born a mediated product to be part of such contexts, to be framed by and appraised in media.

Aesthetic Experience

What is it to experience something "aesthetically"? As a concept, "aesthetic experience" is by no means simple and uncontested. On the contrary, it refers to different understandings in different philosophical contexts. As demonstrated by the philosopher Harry Lehmann (2016), a defining way of understanding the concept of aesthetic *experience* began to evolve at the beginning of the 1970s in German aesthetic theory (15). In this context, the concept of *ästhetische Erfahrung* refers to a dichotomy of subject and object in which, on the basis of certain objects, primarily objects of art, subjects may be affected, experience the world in new ways, or even have a feeling of emancipation (22). My proposal is to approach the concept of "aesthetic experience" in a way that, in this section, questions its epistemological role for producing ways of accessing the world and, in the next section, questions how this experience has been produced historically.

In focusing on the epistemological role of aesthetic experience, I will build on Kant's initiating approach in *Kritik der Urtheilskraft*, in which he lays out the basis for an epistemological understanding of how aesthetic experiences are produced as acts of judgment.[2] The basic point is that aesthetic experiences evolve in a relationship between a subject, with an intention to see and judge something as aesthetic and thereby have aesthetic experiences, and an object, with certain aesthetically coded features that may encourage the judgment of the object as aesthetic (cf. chapter 3).

On this basis, I enter the discussion of aesthetic experience by focusing on aesthetic judgments and aesthetic categories as interdependent factors

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in producing aesthetic experience (figure 4.3). The examination can be laid out in three questions:

1. How can the aesthetic *judgment* be conceived of as a starting point for understanding aesthetic experiences? This question relates aesthetics to epistemology as it deals overall with conditions for human experience. Kant is informative on this point in his discussion about how the aesthetic judgment is a reflective judgment operating as a reflection of sensual matter without the determination of a pre-given concept (cf. chapter 1). How the aesthetic judgment operates is conditioned by the relevant categories and objects in question, which leads to the next two questions.
2. According to which *categories* are aesthetic judgments made? Kant talks about beauty and the sublime (*das Schöne* and *das Erhabene*), but aesthetic experiences today are framed differently because of changed conditions in culture. This is a core question when dealing with contemporary design aesthetics.
3. How might aesthetic experience be influenced by contemporary (to different degrees Westernized) *object* culture—that is, the objects we are surrounded by today? What does it mean to have aesthetic experiences of the kind of everyday (and, hence, not extraordinary) mass-manufactured objects that we may know as "design"?

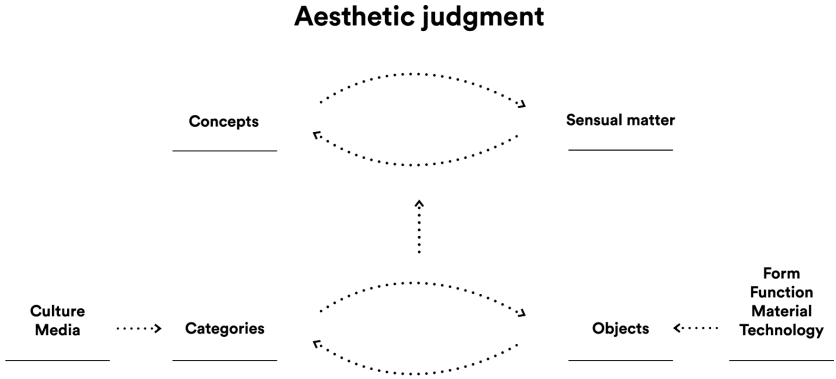

Figure 4.3
Illustration of the operation of aesthetic judgment. Drawing by Johanne Ib and Anne Laustsen.

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Aesthetic Judgment

Aesthetic judgment can be conceived as being a starting point for understanding aesthetic experiences in the sense that it is a mental operation that produces aesthetic experience. This conception of aesthetic judgment is founded by Kant and, among others, reactualized by Forsey (2013a).[3] In the present context, this approach seems productive because it points to the kind of meaning construction taking place in aesthetic experiences instead of just speaking of, for instance, "pleasure" as the only aesthetic parameter in discourses about design practice.

Forsey (2013a) precisely describes aesthetic judgment as a "certain mental activity, rather than a set of properties or qualities that we call aesthetic" (118). The aesthetic is neither given in the things themselves as an objective element, nor is it solely a subjective, and thus arbitrary, judgment, as the faculty of judgment operates according to objective principles in a play in the human mind.[4] The point is that our finding something "beautiful is a product of the *form* of our aesthetic judgments" (128, my italics). Thus, aesthetic judgment may be seen in a constructivist light to produce the aesthetic experience in different ways, due to its constitution and aims.

In Kant's conception, aesthetic experience evolves when the cognitive faculties are put at play in a certain way. Aesthetic judgment evolves when we meet a sensual appearance with pleasure without being able to comprehend it with a given concept. The cognitive faculties of mind, such as imagination and understanding, are put into play in a search for concepts that fit the appearances. Kant speaks of a "reflective judgment" in opposition to "determining judgment"; the latter functions to make sensual appearances and concepts symmetrically fit, whereas the former describes an asymmetrical relationship and open reflection of the sensual without the determination of a pre-given concept. Furthermore, Kant coins the notion of "aesthetic ideas" to describe how thoughts are evoked that cannot be adequately subsumed under a fitting concept (Kant 1995, § 49; see also chapter 2). In not having concepts as their starting point, aesthetic ideas may be relating to a meaning beyond the given, to the *Vernunftsideen*, which for Kant is the pivotal point for philosophical reflection. In this kind of approach, aesthetics is *serious business* as it plays an epistemological role in the way humans engage with the world and (through cognition) reach beyond it.

Aiming to develop an aesthetics of design, Forsey (2013a) analyzes how elements of design and art, such as function and content, are constructed

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as "forms our judgment takes when we are confronted with the appearance of things" (177). In the case of design, aesthetic judgments not only take the form of the free play of imagination and understanding in the search for concepts but also require "some amount of conceptual knowledge of the purposes we attribute to the objects we encounter," which Forsey connects to "dependent beauty" in opposition to "free beauty" (148) often related to art. As discussed in chapter 2, Forsey stresses the relativist and historically variable character of the kind of aesthetic judgments that are not related to free beauty.

In my approach to aesthetic judgment as the central vehicle in producing aesthetic experiences, I will continue to employ the Kantian dynamics of relating sensual matter with more or less precisely defined concepts. But the constitution of aesthetic judgment also needs to be contested; that is, it is necessary to not only question how aesthetic judgments produce aesthetic experiences *but also how aesthetic judgment itself is produced*. Kant may give us a hint with his concept of schematization, which suggests flexibility in how concepts and sensual matter are related (Kant 1990). Schematization conditions our ability to construct meaning through synthesis and, as a product of human imagination, is itself a structure of the human mind that is open to alteration and new configurations.[5]

Kant's reflection is, however, bound to an "internal" investigation of the powers and abilities of the human mind. Instead, we can ask how external factors affect the production of the schematizing effects of aesthetic judgment. So, on the one hand, I argue for a continuous, internal constituent of aesthetic judgment to create a free play of cognitive forces in relating concepts and sensual matter. On the other hand, we can contest which actual sensual matter aesthetic judgment is aiming at and which concepts might be evoked in the creation of aesthetic experience. In this sense, aesthetic judgments are not only operators of epistemology but are also culturally produced.

Accordingly, the consequence is to contest how aesthetic judgment operates on contemporary terms and what role it might play in our interaction with our surroundings. This means questioning aesthetic categories as a framework for the kind of conceptual constructions taking place in aesthetic judgment.

Aesthetic Categories

Aesthetic categories function as ways of articulating and foregrounding what is regarded as aesthetic—that is, how "our way of relating to the [aesthetic]

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idea [Vorstellung] of an object comes to expression" (Gottschlich 2017, 27). The central point is that *the category in question frames what is in focus in the aesthetic experience and, furthermore, which kind of conceptual constructions might be at stake*. Hence, the category can influence how the aesthetic judgment operates in its linking of concepts and sensual meaning. Also, when aesthetics no longer deal with a specific domain of objects (e.g., "art") but with experiences in general, as propagated in relation to "everyday aesthetics" (Oldemeyer 2008; Saito 2010, 2017; Leddy 2012), we can openly reflect on the aesthetic categories as entries to aesthetic experiences. As the aesthetic categories change, so do the experiences they give access to; conversely, we can ask if there still exists an aesthetic experience per se or an essence of aesthetic experience if the categories leading to it might prove to be historically contingent.

Beauty Specific categories have been dominant in history. In the tradition from Kant and back to the British empiricists of the eighteenth century, especially *beauty*, along with the sublime, has been pointed out as a central category for aesthetic experiences. I focus here on beauty, since it has been mostly affiliated with design. Beauty plays a central role for Forsey, which is natural given the Kantian perspective in her approach. She does not, however, treat beauty normatively or ascribe it specific values such as harmony, symmetry, or equilibrium as in tradition; rather, she equates it in a formal nominalism with aesthetic value.

In any case, beauty is central to aesthetic experiences, but as suggested by Gernot Böhme (2010), it has changed its character according to new "technical conditions" enabling new "perceptual pleasure" as well as a new "generation of practically unlimited aesthetic effects" (29). So, for Böhme, beauty can exist everywhere as a "quality of impression," which could have the effect of "intensifying our existence" (30). In Böhme's analysis, beauty as a notion of symmetry and harmony may be antiquated but is still relevant as a category produced by contemporary culture in advertising and design, that is, due to the cultural process of aestheticization in the focus on surface and stage value. Consequently, uncritical reformulations of beauty can still be found in the design literature (e.g., Harper 2018).

Nevertheless, beauty is still effective in relation to design, also, as pointed out by Ben Highmore (2011), as "negative discriminations that propagates racial and age-specific values" and by being "tied to the increasingly unsustainable rhythms of commercial culture" (xiii) through its changes according

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to planned, perceived obsolescence. In the larger perspective, however, the dominance of beauty as a central aesthetic category has been contested, especially in the light of developments in art and culture. In this way, as an example, critical theorist Theodor W. Adorno (1970) in *Ästhetische Theorie* severely has criticized beauty to be deceptive of the real conditions of modern society.

Plethora of categories In fact, the categories of beauty and the sublime may have dominated, but the tradition is, in fact, full of proposals of different aesthetic categories. As an example, Jean Paul's 1804 work *Vorschule der Ästhetik* (Paul 1990) explores many kinds of aesthetic appearances such as the ridiculous, the humorous, and the witty.[6] In a more recent approach, aesthetic experience has been articulated in accordance with categories such as the comic or the uncanny (Schweppenhäuser 2007). Also, the sheer opposite of beauty was investigated in *Ästhetik des Häßlichen* by Karl Rosenkranz ([1853] 2015) with an interest in all possible expressions of the ugly, the unformed, the deformed, the awful, and the repulsive.[7] On this basis, aesthetic categories may be regarded as highly relative and dependent on historical contextualization. With the words of the philosopher Augusto Solórzano (2018, 551), we must be aware of the "redefinition of categories and meanings in the phenomenological and social field."

In her important study on "our aesthetic categories," cultural theorist Sianne Ngai (2010, 2012) emphasizes the constructive role of the aesthetic categories and encourages an analysis of their historical contingency.[8] She points out that "our aesthetic experience is always mediated by a finite if constantly rotating repertoire of aesthetic categories" but that they "have rarely been singled out as primary objects of analysis in literary and cultural studies" (Ngai 2010, 948, 952). The focus in her analysis is not so much the kind of conceptual construction undertaken in the categories as their relativity is due to changed historical conditions and their role today. Her starting point is to state that aesthetics and aesthetic experience always reflect their time. In this way, "aesthetic experience has been transformed by the hypercommodified, information-saturated, performance-driven conditions of late capitalism" (Ngai 2012, 1).[9] On this background, her new aesthetic categories have evolved. In her analysis, the major aesthetic categories of the late eighteenth century, such as beauty and the sublime, are in part replaced with the new, minor, and more "trivial" categories of the *cute*, the *zany*, and the *interesting*.[10] She does away with beauty, which she regards as

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too closely bound to the aesthetic discussions of the eighteenth and nineteenth centuries, whereas she still considers the sublime to be relevant for contemporary aesthetics.[11]

In her proposal, Ngai (2012) talks of a "commodity aesthetic of cuteness," a "discursive field of the interesting" and a "performative aesthetic of zaniness" (1). Basically, these categories are about production, circulation, and consumption, respectively, where the zany is related to production at the interplay of work and play and also to effect and emotion, the interesting relates to the distribution of information, and the cute deals with a "paradoxical complexity of our desire for a simpler relationship with our commodities" in terms of intimacy and care (13). In Ngai's perspective, aesthetic experience has changed from deriving its models from art and the beautiful/sublime to being based on "the stylistic triviality and verdictive equivocality of the zany, the cute, and the interesting that makes these categories particularly suited for the analysis of art and aesthetics in today's totally aestheticized present" (19). At the same time, these contemporary categories are "equivocal as judgments" because they are founded on a "contradictory mixture of feelings": "unfun and fun, in the case of the zany; interest and boredom in the case of the interesting; tenderness and aggression in the case of the cute" (19).

In interpreting Ngai's categories in a context of design, Thomas Lee (2017; cf. chapter 2) stresses this dialectical aspect of Ngai's categories. Instead of focusing on the cute as an obvious category for consumer products, especially in the uprising consumer culture after World War II, Lee points to the category of the zany as relevant for understanding how contemporary service design productively can be conceived as a "synthesis of fun and unfun," where the "designers of such systems must confront questions regarding the right balance between friendliness and impersonality, humour and seriousness, pleasure and friction" (312).

Reevaluation of the role of categories Ngai's proposal of specific new categories is not only a replacement of old categories but also a reevaluation of the general character of aesthetic categories. While tradition privileged distance, play, or disinterestedness as part of aesthetic experience, which was supported by categories of the beautiful and the sublime, Ngai proposes her aesthetic categories to be minor, omnipresent, weak, trivial, and saturated with reality. Whereas the traditional aesthetic categories have their orientation toward some "extra-aesthetic power" in an "agency in realms

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extending far beyond art or culture" (just think of Kant's insistence on the openness of reflective judgment related to *Vernunftsideen*), whereby they testified to be major vehicles for culture and art, the new categories have minor impact but enable a "more direct reflection on the relation between art and society" (22). In being "based on complicated intersections of ordinary affects" (23), the new categories are part of the everyday world and do not designate a special sphere for extraordinary being, whether as the idea of autonomous art in the nineteenth century or production of "perpetual shocks" (21) in modernist art. They are not exceptional and profound. Instead, they are pervasive and integrated in everyday experiences. "Minor aesthetic categories crop up everywhere, testifying in their ubiquity to how aesthetic experience, radically generalized in an age of design and advertising, becomes less rarefied but also less intense" (Ngai 2010, 951).

The last part of this sentence is important to understand the changed role of aesthetic categories and the changed aesthetic experiences in relation to design as "less rarefied but also less intense." In design, we meet appearances everywhere that can be perceived aesthetically, which we are encouraged to do as part of the ongoing aestheticization in culture (cf. chapter 3). They are not to be met through perpetual shocks but with less intensity. We may be encouraged to perceive aesthetically with an "*attention to a play of appearances*" in an enhanced perception, to take up Martin Seel's point (2007, 13, his italics; cf. chapter 3), and we may rather often be encouraged to do so, but then with a kind of everydayness or ordinariness attached to it. This balance, or even paradox, of the special and the ordinary is a constitutive trait of design aesthetics (cf. introduction and, further, chapter 7).

We can attach this reflection to the two lamps described earlier. At one and the same time, they are everyday objects of use (in producing light), subsuming to function, and they attract attention because of a play of appearances. Or stated in the reverse way, they attract attention but remain attached to the everyday. Both lamps attract attention because of their construction and contrasting materials; in the case of the WG24, the two "modern," hard materials (glass and steel) are used, playing with effects of transparency and opaqueness, and in the case of FollowMe, the hard and artificial plastic is combined with the soft and natural (even if highly processed) wood.

Further, the different historical-contextual conditions create differences in how the lamps are being perceived or have been perceived. In breaking

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with conventions of form and materials for lamp design in the 1920s and being a part of the avant-gardist culture of experimentation at the Bauhaus school, the novelty of the WG24 lamp may initially have produced "modernist" shocks, to employ Ngai's wording, later to be replaced by iconization when being perpetually reproduced in books and media as a part of a modernist canon of design. In this change, the aesthetic perception of the play of appearances in the lamp not only becomes habitual (from shock to recognition), and hereby weakened in intensity, but has further entered a sphere of visual mediation, producing images instead of direct interaction with objects.

While the WG24 lamp has been framed by media ascribing meaning to it, the FollowMe lamp is born within a culture of omnipresent mediation of design. Therefore, the physical appearance of the object itself may be difficult to isolate from its staging in media, whether offered by consumers on social media or by the company Marset itself. As an example, Marset promotes the lamp to complement the dimming natural light in an outdoor setting (figure 4.4). The promotional image focuses on the lamp's ability to produce a concentrated ambience while at the same time it accentuates the outer profile of the lamp with the handle rising above the shade.

Figure 4.4
Promotional setting of the FollowMe lamp, 2019. Photo credit: Marset.

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In media settings like this, an aesthetic perception of the FollowMe lamp with a focus on its play of appearances is being produced. In the lifestyle-oriented parts of the culture of design, this kind of visual aestheticization is not an extraordinary phenomenon.

Despite the historical difference between the two lamps, they both testify to the kind of aesthetic experience Ngai talks about: less intense but often present around us as elements of the world we are a part of and not taking places in designated zones for meaning creation as in the (still) autonomous work of art or specific institutions such as the museum (even if design also often is celebrated as if it were art in design museums).

To support her point about the constructive role of categories, Ngai (2012) points out that they operate both as judgments and as objective styles, they are both something that we produce in constructing meaning, and they can be found in objective phenomena. In her view, aesthetic categories are "subjective and objective, evaluative and descriptive, conceptual and perceptual" (29). Styles are culturally produced and codified as such, and they have a bearing on "our perception of them as stylistic qualities" and, vice versa, our perception affects "our language of aesthetic judgment" (29). In the end, a style is not just a feature of the object in question but can be understood as a way of "perceiving an object" (29); that is, it produces a specific perceptual setting. On this basis, a central point is that the aesthetic categories operate in a dialectical structure between "seeing as" (e.g., as zany) as a capability in our cognition and "being as" as a quality of actual objects. How these two go along in design is the topic of the rest of this chapter as I consider categories in design aesthetics in historical perspective.

Categories in Design Aesthetics

As a complex cultural phenomenon, design calls for a variety of aesthetic experiences that are, in turn, circumscribed by a variety of aesthetic categories. Beauty may still be important in relation to design as a part of the history of design, where design during the second half of the twentieth century became separated from avant-gardist experimentation of form and expression and as part of the emerging consumer culture became attached to more classical notions of the well-formed and the beautiful. An early example of this tendency is the American streamlined design that from the 1930s was led by a search for appealing, sellable forms, often inspired

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by aerodynamics. As a part of the consumer culture, the field of design has been closely affiliated with the creation of positive sensations and experiences, and "beauty" and "beautiful" often operate as terms for positive-pleasurable appearances and effects of design.

Thus, even if artistic experimentation has long been part of the design field (and is present in streamlined design) and still is, for instance, in critical design, art and design went separate ways and subsequently found different aesthetic discourses. A commonplace of the aesthetics of art is the conceptualization of communicative abilities and complexities of the aesthetic object and not the question of beauty (cf. chapter 3). In contrast, especially practice-oriented discourses on the aesthetics in design have normatively called for beauty, pleasure, and positive, emotional responses to products, with a focus on "the aesthetic pleasure we gain from designed artifacts" (UMA 2017).

Opening the Field

My point is, however, that not only has the category of beauty as a norm for contemporary aesthetic experiences in general been severely contested, but the field of design may even be open to other aesthetic categories. In representing a transformed object culture with, for example, interactive objects with embedded digital technology or service design solutions operating in larger networks, contemporary design calls for new aesthetic categories to frame the kind of aesthetic experiences evoked by these objects. In this context, Ngai has a principal point in questioning which specific categories are at play today, even if her specific choice of categories can be contested as it is foremost heuristic in its attachment to her discussion of contemporary art.

Within the field of digital aesthetics, media theorist Grant Bollmer (2018) has taken up the concept of aesthetic categories to investigate the aesthetics of digital media art. In the same vein as my approach, he emphasizes the constructive role of categories for producing what can be experienced. He states how aesthetic categories "point to how judgements serve to help us know and make sense of how our world appears to our experience" (186); furthermore, drawing on Jacques Rancière's notion of aesthetics as a distribution of the sensible (see also chapter 3), he notes that our "categories point to how our world has been differentiated and ordered" (176). On this basis, Bollmer asks whether categories may be relevant for analyzing digital media and proposes the categories of "networks," "participation," "remix,"

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and "glitch." In the same way as Ngai stresses the double structure of style and judgment, Bollmer accentuates aesthetics as "formal consistencies" (157) of objects and the value judgments produced.

I will, however, raise the critical question of how, as an example, "remix" operates as an aesthetic category. What is gained by conceptualizing it as an *aesthetic* category when what it does is to focus on phenomena of remix; that is, of mixing different appearances? Bollmer's reason for this approach is his concept of aesthetics, which he formulates in phenomenological terms as "the way something appears to our experience" or as a "synonym for 'style'" (156). Bollmer is right in exploring new categories for the field he is working with, but we may also critically challenge how aesthetic categories not only are vehicles for experience in general, as implied by him, but of specific experiences—experiences of a special character, for instance, with a high degree of attention to the play of appearances.

Conceptual Frames

Bollmer's proposal of general categories of experience in digital art puts to discussion what the *form* of aesthetic categories is. What does it encompass and bring into view? In contrast to Bollmer's approach and in accordance with the discussion above (cf. figure 4.3), I will regard aesthetic categories to set the *conceptual frame* for what is being judged and appreciated as specific aesthetic experiences in relation to design. This implies that the categories are not stylistic specific as they often were in tradition (e.g., the beautiful or the comic). Neither are they generic of experience in general. Instead, they frame which aspect of the design is subject for aesthetic appreciation.

With this as a starting point, I will investigate how central notions in the history of design have contributed to framing what is seen as aesthetic in design. My argument is that the historical heritage of design has produced ways of acknowledging aspects of the aesthetics of design that are specific for design and still effective today. I will start with ideological statements of historical provenience—that is, discursive proposals of what design is or should be. In this account, I will point out different accentuations of the sensual, conceptual, and contextual dimensions of the aesthetics of design.

My focus is on the relationship of design to (1) its heritage in art, (2) the notion of modernism, and (3) the question of the surface, as these have produced different norms for appreciating and judging qualities in design objects.[12] Each of these produces two categories, assembled in table 4.1, for an overview. I differentiate between operation through reference (i.e., how

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Table 4.1
Overview of design-specific aesthetic categories

	Artistic perspectives	Modernism	Surface
Operation through reference	*Aesthetic category of **contemporary newness**: appreciation of how design reflects its age of innovative origin*	*Aesthetic category of **functional realism** (core elements vs. superficial kitsch): appreciation of the honesty/dishonesty of expression*	*Aesthetic category of **semantic reference**: appreciation of sign values of external references*
Operation by effect	*Aesthetic category of **artistic experimentation**: appreciation of design for resulting from artistic experimentation*	*Aesthetic category of **formal simplicity** (seriousness vs. fun): appreciation of form (in different modalities) as means of communication*	*Aesthetic category of **ontological transformation**: appreciation of the ability of objects to enter and be transformed in media contexts*

the design object is being evaluated according to its ability to refer to meaning) and operation by effect (i.e., how the design object is evaluated for its ability to be the result of a process or to evoke new processes). This division is not clear-cut and primarily made of heuristic purposes. The categories do not mutually exclude each other but offer different framings for aesthetic experiences in design, which I will illustrate with the two case lamps. As the categories operate as ways of perceiving something as aesthetic, several aesthetic categories may be relevant for the same object, as will be clear in the analysis below. Or, in reversing the argument to the perspective of aesthetic experience, contemporary aesthetic experience is always being based on "impure" judgments resulting in a "mode of mixed feeling" (Baßler and Drügh 2021, 230) as also implied in Ngai's dialectic categories. In combination, the categories proposed here provide a framework investigating the aesthetics of design in relation to *form*, *function*, and *purpose*.

Artistic Perspectives

The relationship between art and design is a complex matter. Certainly, art is a part of the historical heritage of design, even if it may be difficult to see from a position of contemporary design often dominated by a focus on

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innovation, problem solving, and technical functionality. But looking back at the development of modern design at the beginning of the twentieth century, art stands out as a central, formative element in the discourse on design.[13] As early as the British Arts and Crafts movement in the late nineteenth century, the importance of traditional handicraft and the skilled artist was claimed in a reaction to the growing industrialization. Beyond this movement, design was regarded as "applied art" and as a way of integrating art into the mass products of everyday life. The ambition was to relate art to design, either (1) in connecting art to industrial production in order to create an adequate expression for design or (2) taking artistic experimentation as a starting point for developing a new form language in accordance with the age.

Based on these two approaches to art, I will formulate two aesthetic categories according to which design, in an art perspective, is perceived to have certain aesthetic qualities: a category of *contemporary newness*, where the design is seen to reflect the conditions of its era, and a category of *artistic experimentation*, where design operates as a means for exploring the new and unforeseen. Both categories have in common an orientation toward the new, whereby they very much are a product of a progressive, modernist, and even avant-gardist approach to design. They leave behind traditional, antiquated notions of art as beautiful and, consequently, of design as being art's heir in producing beautiful forms that are harmonic, consistent, and balanced.

Contemporary Newness

The first model of turning to art in relation to industrial mass production finds its seminal expression in the German Werkbund (founded 1907), aiming to nurture productive corporations between art and industry. With a positive attitude toward industry, Peter Behrens (1868–1940), founding member of the Werkbund and renowned as one of the first true industrial designers, pointed to art as a means for creating contemporary expressions of design. In a speech from 1910, he propagated the opportunity for industry to create "culture" through the "bringing together of art and technology" (Behrens 2010, 27). In claiming the "inner connection" of art and industry, he stressed that the ambition of the new design was not to imitate traditional handicraft or former styles, but artistically to create an adequate form to the "machine and mass production" (26). As an example, in his time he talked

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about how electricity can have a new "expression of form [Formenausdruck]" and how new aesthetic conditions arise with the new technological possibilities: "The artistic advantage of the electric light is first of all that it is not at all dependent on heavy-carrying bodies but that it unstrained can be disseminated everywhere in spaces" (26). What Behrens articulates is an important aspect of modern design, predated in the 1890s by the Jugendstil and art nouveau, which is the ability to express its age. This is not just a matter of "communicating the functional role of the object," as suggested by Feige (2020a, 165), but a proposition of contemporaneity in the design that, aided by artistic means, can have "manifest effect" for the eye (Behrens 2010, 25).

Formulated as an aesthetic category, this would be, as stated above, a category of *contemporary newness*, where the category gives way for an experience of how design objects reflect their contemporary age. In relation to the sensual, conceptual, and contextual dimensions of the aesthetics of design, the category of contemporary newness is based on sensual appearances but relates to a conceptual reflection of what contemporaneity is, which, obviously, also relates to the contextual dimension—that is, the underlying ideological proposition of the design, for instance, of being emphatically modern in its expression. The critical question is here, though, how and whether it is a specific artistic ability to reflect the contemporary age. In Behrens's (2010) view, art is a means to work with the aesthetics of the industrial-technological products; conversely, technology should be open for the "wanting for art of the age" (27). As stated, Behrens's program is an integration of art and technology. What I will consider as the artistic element here is not only the question of specific means of form and expression, whereby the design object would mimic artistic means, but *an openness in the design object to encourage a reflection of the role and ability of the design*. Contemporary newness, then, addresses how the design object integrates different means and elements of its age to become a reflection of its age.

Behrens's example of the design of electricity relates directly to the cases that I highlight because the freedom provided by electric light has led to lamp designs reflecting the contemporary age. In the case of the WG24 lamp, this reflection is enabled by the employment of modern materials such as steel and glass and by the attempt to create a design based on an abstraction of pure geometrical forms (which, again, are supposed to look industrially manufactured but in fact require handwork). The lamp integrates the

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technology of material and a kind of artistic reflection of form. But at the same time, the aesthetics of the lamp is not only dependent on the object itself but also, when seen from a present-day perspective, on its historical context. Being an object of the Bauhaus and being massively present in design books in relation to this period, the evaluation of the sensual appearance of the lamp is framed by the contextual discourse of what the Bauhaus was about. This unavoidable condition sets the frame for the conceptual aesthetics of the lamp, because the idea of the lamp is to reflect a period in design history.

A different reflection of contemporaneity and integration of different means to reflect this is present in the FollowMe portable lamp. Not being a "historical" object, it does not in the same way as WG24 represent a specific past era or ideological proposition of design. Instead, it produces its contemporaneity by setting electricity even more free by not being dependent on a cord. Thus, its contemporary contextualization is that of mobility and of relating to mobility and lifestyle settings, which, of course, is an ideological proposition related to late-modern consumption practices. In this instance, the lamp is less an integration of art (in form) and technology (in material) than an integration of parameters in culture and the ability of the object to nurture these.

Artistic Experimentation

The second model, art as an approach to experimentation in design, is central to design practice and design education also today. Much design education in design schools builds on art education, and the formative example of doing so is the Bauhaus school in Germany (1919–1933).

Starting out as an art school, the Bauhaus soon turned to a practice of exploring forms and materials reflecting industrial culture. Already, though, in the inaugurating manifesto by the first school director, Walter Gropius (1919), the integration of art and craft as a reflection of the age was envisioned in the image of "the new building of the future, in which everything will be one form [Gestalt]: Architecture und sculpture [Plastik] and painting." Whereas Behrens's vision, in rough, was based on a fusion of art and technology, the original Bauhaus vision was focused on integrating the arts (see Munch 2021), just as Bauhaus later came to be epitomized as a design school stressing experimental art-based approaches (cf. Alexander 2017).

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On this basis, the means and methods employed by the staff and transmitted to the students at the Bauhaus were characterized by a disruptive and often open exploration of artistic means, for example, in the studies of color, form, and movement conducted by Johannes Itten, Wassily Kandinsky, and László Moholy-Nagy, among others.[14] Often, however, the artistic bias of the open exploration of a new language of form was in contrast to, and even in contradiction with, the requirements and constraints of industrial production. In this way, the Bauhaus school produced few products apt for industrial production; a notable exception was a collection of tapestries that from 1929 went into industrial production and where styles still are in production today (see Schwartz 2006). Still, the school laid the foundation for much of modern design: in the exploration of a new form language, often foregrounding geometry and simplicity, as well as the working method of integrating the artistic experimentation as a central means in the process. In comparison with later, more rationalist approaches to the design process from the 1960s and onward, for instance, in operating with a formalized triumvirate of analysis, synthesis, and evaluation as a basis for design (e.g., Lawson 2005; Cross 2007), the focus on artistic experimentation in the Bauhaus is largely built on a "romantic vision" of "an avant-garde role for their crafts-arts-designers" (Engholm and Salamon 2017, E1.7).[15] In the dynamics of artistic experimentation, the goal may be stated, albeit only vaguely, such as the Bauhaus vision of integrating the arts to create a better future, but the actual artistic means are always under constant development.

The question is, then, how this mechanism unfolds as an aesthetic category and how it provides a structure for aesthetic experiences. The point is that the aspect and degree of actual experimentation is difficult, if not impossible, to detect in the finalized objects. It may play a role in the design process—for instance, in working out prototypes, which I will discuss in chapter 5—but its specific character cannot be reconstructed in retrospect through the final design. Not being a matter of immediate sensual appearance of objects, it can still affect our experience of objects if we have the *knowledge* of them as results of artistic experimentation. In this respect, this category is foremost, like the category of contemporary newness, based on a contextually framed conceptual reflection. But it also relates to the category of formal simplicity (discussed below) because what can appear simple (and

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maybe witness to be surprising in new constructions and effects of materials) can testify to be a result of a perhaps long process of experimentation.

This is the case with the WG24 lamp, which often is celebrated in the context of the Bauhaus modernist ideology of exploring new forms but also in contemporary design with a high degree of storytelling about how the designers struggled to find the proper form. Consider the example of the storytelling and visual mediations of the Vegetal chair (figure 3.1), which the designers staged to be the result of an artistic, experimental exploration of form (and less of finding the right material and developing the right construction). Thus, the context of information about the design may not just be given but also *constructed* through marketing devices of flashing sketches along with the product or in means of storytelling. Perhaps the most famous piece of storytelling in design is Philippe Starck's story about how the idea to the Juicy Salif "came to him" as a fusion of a squid and a spaceship while dining at an Italian restaurant and sketched on a napkin (see, e.g., Cross 2011).

Hence, the aesthetic category of artistic experimentation operates foremost on a conceptual and contextual level. To appreciate the artistic experimental dimension of the finalized object, such as the WG24 lamp, as a central aspect for its appearance, we need to have a knowledge of its context of becoming, which then can affect how we understand the idea reflected in the design.

Modernism

The perception of design as part of a modernism reflecting a developing modernity in production, culture, and society is a central part of the heritage of design. Especially in the first part of the twentieth century, hence also in the Werkbund and the Bauhaus, design was embedded in a comprehensive and progressive ideology of reforming societies and creating social change. Accordingly, design was conceived to be a tool for the desired reforms and changes whereby, subsequently, the progressive ideology became linked to certain modalities and expressions of design and eventually developed into a "style" aimed to mirror the modern impulse of design (cf. Sparke 2013, 73).

The link between ideology and formal expression is epitomized in Adolf Loos's influential text on "Ornament and Crime," originally written in 1908. The ornament is not only a matter of surface qualities but represents with wide implication "dissipated workforce," "dissipated health," "dissipated

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material," and hereby "dissipated capital" (Loos 2010, 84). With a progressive view on culture and civilization, Loos states that the "ornament no more is a natural product of our culture" and relates the lack of ornament to a condition where the "objects aesthetically would last as long as they physically do" (84–85), which is what we today could call "aesthetic durability" (cf. chapter 2).[16]

Modernism in design is not only a matter of the past, even though its roots are historical, but it is still effective as an ideological claim of design to be progressive, future-oriented, and related to reform. We may, however, see the "high-minded idealism underpinning modernist design ideas" in a constant tension with the "value-free approach of the postmodernists," to use a critical phrase of design historian Penny Sparke (2013, 4). Another way of articulating this difference is to focus on modes of temporality, where Andreas Reckwitz (2019) relates modernism to an orientation toward the future that loses the sensibility for the present, while the tendency to privilege the special in late (or post) modernism produces an "orientation towards the present" (62), even to a degree where only the "moment" (cf. Bohrer 1981) or "presence" (cf. Gumbrecht 2003) counts. Below I will turn to the "postmodern" focus on the surface, but for now I will focus on aspects of design's heritage in modernism for framing design aesthetically.

I will formulate two aesthetic categories that relate to the way the aesthetics of design often is described in popular discourse related to modernism: a category of *functional realism* and, in close connection to this, a category of *formal simplicity*. The first category relates foremost to functional qualities while the latter relates to form, even if the realism of function unfolds in form and, accordingly, the formal simplicity depends on function. The main difference is their entry points for aesthetic appreciation: function or form.

Functional Realism

Within the category of *functional realism*, qualities in the design such as honesty in material, expression of function, and economics in manufacture are central. What is being appreciated as an aesthetic quality in the design is its ability to be honest and direct in appearance and communication what it is about. Functional realism thus implies an honesty and directness in expression, almost to the point of reducing the design of being a type and eschewing decoration. This is not quite the same as stating that

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"form follows function," a credo ascribed to the American architect Louis Sullivan in the late nineteenth century and often seen as a dictum for a basic functionalism in design (see also chapter 6), because what is central is the *realization* of function, which not only has implication for form but also for the choice of materials and the manufacture process.

Celebrating the honesty of function A functionalism based on simplification of form, assumed to lead to better usability and quality, is integrated in the discourse on design to such a degree that it has been claimed as an "aesthetic definition of the concept of design" (Hauffe 2008, 10).[17] Functional realism unfolds in modern design as a tendency to functionalism, epitomized in Marcel Breuer's steel tube chairs from the Bauhaus period or the utmost reduced functional character of Max Bill's "Ulmer Hocker" (stool) from the 1950s (figure 4.5). In the Ulmer Hocker, functionalism unfolds as the search for the essence of the product by the simplest means while the reduced semi-cubic structure paradoxically gives way to a multifunctionality of purpose: as stool, as table, as shelf, and (if a drawer were inserted) as a chest of drawers.

As a category for evaluation, functional realism is implicitly present in aesthetic theories on design, notably in the privileging of modernism in design (Parsons 2016) and the notion of "looking fit" (Parsons and Carlson 2008) (see chapter 2). Functional realism is, however, not only a positively stated ideology of honesty and directness of expression but reflects also negatively what should be avoided. An example from the history of Werkbund illustrates this dialectic.

Kitsch: Reversing "good design" In 1909, Gustav E. Pazaurek (1865–1935), Werkbund member and director of Landesgewerbemuseum Stuttgart, opened an "Abteilung des Geschmacksverirrungen," a section for taste disturbances, in his museum. In a "Folterkammer des Ungeschmacks," a torture chamber of bad taste, Pazaurek collected what he regarded as bad products in order to educate the audience on the better taste of appreciating products using proper materials and being simple and direct in expression. His basis was the ideology of "good form" of functional design being transparent of its purpose and having the potential of modernizing culture. With this normative bias, he used his authority and institution to exercise the power of communicating what is bad and what is good. Paradoxically, his educational project came most clearly through in the display of what not to do. He

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Figure 4.5
Ulmer Hocker. Design by Max Bill, 1954. Manufactured at the Hochschule für Gestaltung Ulm. Image licensed at the Creative Commons Attribution-Share Alike 3.0 Unported.

categorized the errors of the everyday material culture of his time in failures of material, construction, or decoration, each with several subcategories, such as "functional lies," "odd proportion," and "manic ornamentation, wasteful decoration" (Volkers and Flagmeier 2013, 66–67). For instance, he displayed why a mug with the face of Bismarck, the Prussian chancellor, can be seen as an example of "Hurra-Kitsch" where portraits of important persons are used, unnecessarily, for decoration (figure 4.6) or how a clock made of wood is a "Material-Vergewaltigung," a violation of materials.[18]

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What makes Pazaurek interesting is the proposed dialectical duality of good and bad and the implied power issue of right and wrong, where the wrong paradoxically is being displayed while being despised. The duality in evaluating design as either good or bad is a central part of the normative bias in modernism and has led to a split in two contrasting registers of design: on the one hand, modernist design with a clear display of purpose and an honesty of expression, and on the other hand, design that is "the absolute antithesis to the artistically inspired quality work" and disregards all "ethical, logical, or aesthetic demands" in claiming that "the object must be *cheap* and yet still attempt to create an impression of a higher value"—in other words, "*kitsch*" (Pazaurek 1912, 349, his italics).[19] My point is that the aesthetic category of functional realism is open for aesthetic experiences in both directions. It is open for the clearness and "honesty" of modernist design as well as for the "dishonesty" of kitsch.

On this point, kitsch is interesting because it breaks with the conventions of modernism. It explores the fake, the ornamented, and the being of design as artificial (cf. Bayley 2012) and can lead to a highly diverse variety of appearances.[20] Kitsch existed before the advent of plastics, but as a new, flexible kind of materials, plastics created new possibilities for creating "dishonest" objects. In art theory, kitsch has mostly been negatively evaluated as a request for "popular, commercial art and literature" by new groups of consumers and, consequently, seen as an offer of "vicarious experience and faked sensations" imitating the effects of art (Greenberg 1961, 9–10). It has been valued as "a world of winsome make-believe, of sugary promises, of instant reward; and kitsch itself is pseudo-art—art which pretends to a status which it cannot acquire" (Scruton 1998, 232). In contrast, cultural theory has more positively pointed to the possibility of consuming kitsch in a highly reflective and aesthetic manner to demonstrate subcultural capital and social distinction, for instance, as "camp" (Sontag 1966; see further Bayley 2012). Today, the design world is full of advanced, self-reflective, meta-kitsch objects, including much of the work of Philippe Starck or Karim Rashid, whose designs sometimes contain kitsch elements of references to popular culture (e.g., garden gnomes) within an otherwise "modernist" object type.

Re-reflecting "good" and "bad" design At the same time, the poles of honest modernism and dishonest kitsch are dynamic and submitted to

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Figure 4.6
Beer mug with the face of chancellor Bismarck, c. 1890. Landesmuseum Württemberg, Stuttgart, Hendrik Zwietasch.

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historical circumstances. A core legacy of modernism is, though, claims of "good design" by design reformers and educators. Examples are the "Good Design" exhibitions at the Museum of Modern Art (MoMA) in New York in the 1950s (see Michaëlis 2016) or design prizes praising the "good" in terms of quality, formal expression, and innovativeness.[21] However, what is "good" or "bad" undergoes change. In the 2009–2010 exhibition *Böse Dinge. Eine Enzyklopädie des Ungeschmacks* (Evil things: An encyclopedia of bad taste), Pazaurek's project of displaying variations of bad taste was taken up again by the Museum der Dinge in Berlin, which also functions as an archive of the Werkbund.[22] In an update of Pazaurek's project, the museum invented—and invited the audience to invent[23]—new categories for design that fall outside the norms of "good" and morally correct design, such as "support of acceptance of violence," "child labour," and "sexist design" (Volkers and Flagmeier 2013, 67). Celebrated design objects, even "design icons," have been selected to be *böse Dinge*: the Stelton coffee pot (a 1979 design by Erik Magnussen) because of its "adverse distribution of weight" or the Juicy Salif citrus squeezer (cf. figure 3.4) because of its "purposelessness/peril of the object" (Volkers and Flagmeier 2013, 104–105). Pazaurek would probably not have been fond of the Juicy Salif either, even if this is speculation; in contrast, the Stelton pot, besides being a design prizewinner and a Danish design icon, does have a quite direct and honest appearance in its geometrical, cylindrical form.

Regarding the two lamps that I have used as examples, they would seemingly relate directly to the "good" side of functional realism in being rather simple, clear-cut objects without much overt ornamentation, something that could have been a trait of a kitsch product. In this sense, they can be submitted to an aesthetic evaluation according to the modernist aesthetic category of functional realism. They can be appreciated because of their honest appearance in their almost abstract reduction of form to simple geometries of circles, curves, and lines. Their sensual appearance would fit the conceptual dimension of how the objects should be understood and appreciated according to their type—that is, as table lamps and, more specifically, table lamps signifying modernity and contemporaneity. However, the WG24 runs the risk of a negative evaluation on the basis of dishonesty. It is made to appear to be industrially manufactured while it is not. It does not function well as a reading lamp; rather, it appears as a meditation on geometry and on lighting as a concept for modern design. Depending on

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perspective and specific formulation of "bad" elements in the design, we may evaluate the WG24 as honest or dishonest in appearance, perhaps even both at the same time.

Formal Simplicity

In the affiliated category of *formal simplicity*, modalities of form come into focus. In the discourse of modernism, form is not only an outer superficial aspect but a means to communicate, carry information, and reduce complexity; hence the emphasis on "simplicity" and, furthermore, minimalism and purity. This aspect of design relates to what Andreas Reckwitz (2019, 15) has termed "formal rationalization" as a process of standardization and typifying in modern societies. This category encompasses an evaluation of the design according to how complexity is reduced through the outer appearance of form (i.e., how form may create a sensual appeal) and how the sensory aspect always relates to a conceptual reflection of the meaning content of the design, its "idea." Seen in relation to the question of function, formal simplicity is a matter of a function being "visually expressed" through form (Mollerup 2019a, 79).[24]

Hereby, an evaluation of form as only outer formal appearance would be trivial. For example, considering a vase in terms of its shape, color, and decoration would be an evaluation of the vase as a traditional "artful" object. Instead, the kind of aesthetic experience called for by this category is an experience of the informational value of the form. To stay with the vase example, Hella Jongerius's 1994 design, the *Soft Vase* (figure 4.7), may evoke such an evaluation of the relationship of form and informational value. By using the unusual material of rubber, a tension is created where the vase appears stabile while being physically unstable. Hereby, the informational value of the form of the vase is put into play, which may evoke an experience of how the form reflects the idea of the vase.

Ulm simplicity Historically, the focus on formal simplicity finds resonance in the reevaluation of design aesthetics in the Hochschule für Gestaltung at Ulm in Germany (HfG Ulm, 1953–1968). The concept of aesthetics in HfG Ulm does not directly relate to form but to the informational value of the design. In a crude generalization, HfG Ulm aimed to reframe design as a response to the contemporary technical civilization and hereby distance itself from the focus on art and artistic education in the Bauhaus.

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Figure 4.7
Soft Vase for Droog, 1994. Design by Hella Jongerius. Photographer: Gerard van Hees. Photo credit: www.droog.com.

According to HfG Ulm cofounder Otl Aicher (1991a), art was on the verge of the unnecessary or could even be dangerous for the pursuit for modern, technological design. In his words, technology may have its "own technological beauty," whereas art does not have a "technological dimension" but only empty communication, and attempting "to transfer art to technology would be doing sugar coating, whether of a Stalinist kind or of a postmodern quality" (24–25). In his retrospect essays, Aicher severely criticizes what he regards as seductive, unnecessary, beautifying surface effects of postmodern design (viciously brought in conjunction with Stalinism!) and praises sober, analytical, and critical design. In large, he advocates for critical and well as purposeful aesthetics. According to Matthew Holt's (2020) detailed study of the formation and development of "Ulm Aesthetics," the principles of this new aesthetics were conceived to be "semiotic, scientific and profoundly influenced by the then embryonic information theory revolution" (140) and eventually embedded in a concept of designing (for) the environment, *Umweltgestaltung*. In Holt's analysis, the aesthetics of Ulm was "part of a positivistic and structural approach to a general grammar of design" and "element of a syntax of the systematic shaping of the industrial surround" (144).

Holt, though, also notes the ironic contrast between the "multiform approach to aesthetics" at the HfG Ulm, foregrounding sign value and

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information and the fact that the school was "notorious for an entirely specific 'aesthetic': clean, minimalist, proto-computational, seemingly without humour or whimsy; all encapsulated by the famous 'right angle' of Ulm, *der rechte Winkel*" (Holt 2020, 154, his italics). But as an aesthetic category and part of modernist discourse, the contrast dissolves. The minimalist, purist, clean, and technological character of the outer appearance is always bound to communicating the idea of the product. In this sense, the modernism of formal simplicity is not a matter of styling but part of the seriousness of the design related to the depths of the ideology and the purpose of the design. Historically, then, formal simplicity to a large degree relates to a "serious" modernism prevalent in Europe, such as the indeed serious modernism of HfG Ulm, which found its quintessential expression in the designs of Dieter Rams for Braun in the 1960s and his 1970s dictum of good design being "so little design as possible." (2017) This kind of formal simplicity was adopted in a US context where a focus on outer form became a trend from the 1930s onward in streamlined design. Hereby, dialectical flip sides of the category of formal simplicity come to light. Opposing the seriousness is fun and play, opposing the depth of the surface is the lack of a meaning of the surface, and opposing the minimalism is a "maximalism" of overtly sensually appealing effects as, for instance, in the use of strong colors and brassy textures.

Minimalism Minimalism makes a special case of formal simplicity because it not only is a question of reducing appearances but also of opening to and enabling, even inciting, new experiences, as pointed out by the Danish design historian Anders V. Munch (2003). In his analysis, based on the aesthetics of Adolf Loos, minimalist appearances direct the viewer's focus away from the overall simplicity to a near view of the "play of material, the complexity, subtle proportions and structures of texture" (2). Minimalism in design may thus have its meaning in reducing "the overall shape in order to make the perception of other aspects possible, that is, another complexity" (Skou and Munch 2016, 9). The result is not only a new perception of otherwise not-seen qualities but also an intensified focus on the objects themselves because nothing else, such as ornaments or decoration, would distract the attention from the basic of the objects. In this way, "new aspects of the object or of perception, which otherwise would not be noticed," (Munch 2003, 9) surface, forming a new kind of reflective perception of what normally remains hidden from sight and slips in everyday, nonattentive perception. The premise is, of course, that the viewer accepts

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the invitation to this kind of intensified perception of details and textures rather than merely seeing simple surfaces and forms.

On this point, minimalism is a central part of the design history of reformist modernism, where designers such as Loos or Mies van der Rohe and, later, Ulm designers such as Dieter Rams and Hans Gugelot had the ambition to teach viewers (that is, consumers) to appreciate the aesthetics of minimal appearances.

Being evaluated according to the aesthetic category of formal simplicity, both the WG24 and the FollowMe lamps seem fit for the category as they appear to conform to a norm of modernist simplicity and to carry the informational value of reducing complexity. Especially, the FollowMe lamp is close to minimalism in its reduction to simplest means and the continuity of the white between base and shade. Neither of the lamps appears overtly playful through effects of color or decoration. At the same time, the aesthetic experience called forward by this category is an appreciation of the appearance of the objects in relation to *how* simplicity is solved in the object and *why* it takes place. On this point, the WG24 appears as a more "serious" lamp as the reason for its simplicity is to demonstrate principles of form. It appears simple but contains a complexity of effects in reflections of steel and glass. It is a prototypical modernist lamp with a "depth" behind the surface. In contrast, the FollowMe lamp does not have an ideological foundation such as the WG24. Its formal simplicity finds its rather simple motivation in a playfulness in use and its ability to be part of lifestyle settings. This is an easygoing lamp for many uses, and it can be aesthetically evaluated for its formal appearance as a way of supporting its flexible use in different contexts.

Surface Qualities

In later historical developments, the surface of the design object became detached from the seriousness and progressive ideology of modernism (of the European kind), leading to a more overt celebration of pure surface qualities. This is the case in the aforementioned streamlined design in the US context, with a prerogative of sensuous, appealing form through organic shapes and inspiration from the aesthetics of a physical phenomenon such as the principles of aerodynamics. Based on statements like Raymond Loewy's (2022) claim of making "daily life of the twentieth century more beautiful," the surface became a means of appearance and expression of beauty.

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Furthermore, postmodern design of the 1980s, especially in the Italian context (e.g., in the Memphis Group), challenged the progressive ideology of modernism and explored the expressive dimension of surfaces and the synthetic, artificial element in design by working with bright colors and exaggerated, often oversized, and playful forms. The idea of reflecting the age is still present in both streamlined design and postmodern design, but what lacks is a foundation in ideology related to reform or societal improvements. In this way, the "ideology" of postmodern design could be stated to be a conscient neglect of progressive ideology.

The role and effect of surfaces have been contested in theoretical discourse. In critical theory, surfaces have foremost been negatively valued as a mode of superficial styling and a means in the service of manufacturers and retailers to persuade consumers to buy (unnecessary) commodities. In his seminal 1971 work *Kritik der Warenästhetik*, Wolfgang Fritz Haug (2009) severely criticized the surface in styling and packaging of objects for performing an aesthetic abstraction with the aim of seducing consumers (see also chapter 3). In contrast, Per Mollerup (2019b) has proposed the concept of "pretense design" to describe the intentional play with designing a "counterfactual surface that misinterprets the substance" (26) with the purpose of affecting the audience or user.

In a wider philosophical context, Gernot Böhme (2016) has used the concept of "aesthetic economics" to propose a positive understanding of the role of the surface. Böhme's point is that the exchange value of commodities in contemporary capitalism has gained "an own quality, an aesthetic quality" (100) and that this basic condition has led to a new kind of use value that he calls "Inszenierungswert," or *stage value*. Contrary to the Marxist notion of use value as the basic value of purpose in a context of use, on which Haug also builds, the new use value is based on the exchange value and gains its use function in the staging of life, "Inszenierung des Lebens" (100). On this basis, Böhme argues that the aesthetic qualities of commodities "create a new kind of use value which is derived from the exchange value as they make use of their attractiveness, radiation and atmosphere: they serve to stage, to fit out and to intensify life" (27).

In this manner, Böhme (2016) aims to demonstrate, and positively evaluate, a new condition in capitalism, the aesthetic economics, where values are produced that, to a large degree, "in reality are not needed" (28). Consequently, production is organized in a new way. Instead of just meeting

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needs that can be fulfilled, production meets *desires* that, paradoxically, are being intensified when they are met and hence never fulfilled. In Böhme's view, we have come to a phase "where a large part of the production in society becomes an aesthetic production, which no longer serves use values but rather stage values" (39). On this point, Böhme also opposes Haug. Whereas Haug, in his analysis influenced by Marxism, aims to criticize the seductiveness of the surface in order to get "back" to the original core of the use value, Böhme points to the contemporary fact that the "aesthetics of the commodity [Warenästhetik] satisfies a need in the buyer which is *not* directed at the use value" (34)—that is, the need for staging life and exploring desires. In this way, Böhme describes how aesthetic appearances may encourage consumers to continuously explore new desires.

The question to be raised, then, is which aesthetic experiences are enabled by the focus on the surface as a constitutive and positively valued aspect of design. My point in anchoring this aspect of design in a specific historical context is not to unfold design history as a pattern for the development of different aesthetic categories. But the focus on the surface is historically framed in the sense that it differs in "serious" modernism and "playful" postmodernism. Accordingly, the aesthetic experience framed by the focus on the mere surface, without reference to depth or ideology, is different from the experience framed by, for instance, the category of formal simplicity with its reference to the motivation for simplified appearance. It is a difference of regarding the surface as a purpose or as a vehicle, respectively.

On the basis of purposeful surfaces, I propose two aesthetic categories setting the frame for aesthetic experiences based on surface qualities of design objects: a category of *semantic reference*, where the surface leads to an aesthetic experience building on what the surface refers to as a sign, and a category of *ontological transformation*, foregrounding the ability of the design, through its surface qualities, to enter new contexts. Seemingly paradoxically, these categories build on the ability of the surface to point beyond itself; in this way, however, the purpose of the surface is not to be the vehicle of an underlying ideology but to produce effects of new meaning.

Semantic Reference

Within the category of *semantic reference*, the ability of the surface to refer to meaning entities outside the design comes into focus; it is an aspect of design that also has been explored by the discourse on product semantics

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(e.g., Krippendorff 1989, 2006). In this category, the appearances of the Juicy Salif citrus squeezer (figure 3.4) or the Vegetal chair (figure 3.1) would be appreciated for the ways they reference squids/spaceships and plants, respectively. That is, their form would not just be appreciated for its intrinsic qualities qua outer shape but for its extrinsic sign value. Not necessarily the sign reference is the object of appreciation (squids and spaceships); instead, what is being appreciated is the ability of the design object to contain a sign value and the act of referring—that is, the *relationship* between the design object as material object and the inferred sign reference.

To be concrete, design objects may be valued for their metaphorical qualities. "Metaphor" derives from the Old Greek meta (over, beyond) and phero (carrying, convey). Meaning is carried over from one domain to another, whereby the domains cross-fertilize. To phrase it in the words of metaphorical theory, the Vegetal chair functions as a "tenor" to be ascribed the meaning of plants, which as a "vehicle," is being attributed to the chair.[25]

In the process of referring, sensual, conceptual, and contextual dimensions of aesthetics are at play. The sensual appearance of the objects is being aesthetically evaluated for its relationship to the kind of conceptual meaning produced by the sign reference, whose character is determined by contextual factors. In this category, the aesthetic experience is an experience of the playfulness of appearances regarding their reference to an external meaning entity. This experience builds, obviously, on the sensual appeal of the design, but foremost it is embedded in a conceptual reflection of the meaning of the object in question.

To exemplify, both case lamps operate with sign reference. Seemingly, though, the WG24 lamp appears "literal" in not incorporating explicit references to a meaning beyond itself. It is not metaphorical by integrating "vehicles" of, say, cats or gnomes, vehicles to be found elsewhere in design. Still, it contains sign reference. Here, Peircean semiotics provides a useful division of two strategies for sign reference, the icon and the index (Knappett 2005).[26] While the icon operates by resemblance in look or feeling, the index employs the reference indirectly. It refers by means of contiguity, causality, or a spatial-temporal relation. In its use of glass shade, the WG24 lamp refers to previous petroleum lamps, but foremost it produces resemblances to industrial culture through the materials of steel and glass while at the same time attempting to bear an indexical-causal reference to its manufacture as part of industrial culture. On this basis, the aesthetic

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experience related to the category of sematic reference is much the same as in functional realism. It is an experience of how the appearance of the lamp constructs and confirms a sign language of industrial modernism.

In contrast, the reference of the FollowMe lamp operates through two different kinds of iconic resemblance. First, its shade in continuous connection with the foot may look like and thus metaphorically induce a mushroom, even if the reference is abstract solely by profile and not by color and texture, as compared with the Heico mushroom lamp (figure 4.8).[27] Second, being a contemporary lamp, it may resemble similar lamps through the curved, white shade. While the WG24 was the first of its kind, the FollowMe lamp is part of a larger pool of lamps that it in part differs from and in part resembles. Next, its indexical references differ from that of the WG24. Of course, materials may also here contain a reference (e.g., to a clash of nature/wood and culture/plastics), but even more, the form of the lamp spatially and temporally and causally refers to contexts of flexible and

Figure 4.8
Heico mushroom lamp, manufacture of this model dates back to the 1990s: handmade, powered by a 1.5-watt LED light. Photo credit: Egmond Toys.

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mobile use. The top of the lamp is not its shade but its handle. Thus, the aesthetic experience within the category of semantic reference is an experience of how the lamp, based on its form, may resemble something else: mushrooms or other lamps.

Ontological Transformation

With the category of *ontological transformation*, I aim to describe aesthetic experiences evoked by the transformation of appearances when design objects enter new contexts, especially in media. This means appreciating how objects through surface qualities appear in new ways in new settings where they inevitably undergo a transformation. For instance, the basic transformation from material object to an *image* of the object may change or even distort the appearance of the object. In their structure, images build on a double structure of negation and positioning whereas the material object is negated as the foundation for a creation of new meaning, which builds on the negated object but is not identical with the object (cf. Folkmann 2019a).[28] Images are evocations of new presences with a basis in negation. What is sensually present obtains new conceptual meaning by being recontextualized. The result is that aesthetic appreciation gets displaced from the object to itself to different representations and mediations of the object. As pointed out lucidly by Baudrillard (2005, 193), advertising creates an own logic of images referring to other images; in this process of transformation, "the image is by no means the shortest way to the object, merely the shortest way to another image."[29]

The contemporary transformation of object-as-image in media reflects conditions in late-modern societies that encompass how objects are present in media and which qualities are valued in objects. First, media and objects are part of a common structure, where the one can transform into the other. As pointed out by Scott Lash and Celia Lury (2007), a pervasive "media-environment" has developed where "image has become matter and matter has become image: media-things and thing-media" (9). In this double process, things turn into media appearances, destabilizing the entity of things, and conversely, media products may become "*thing*ified" (4, their italics), for instance, in the form as merchandise. In this analysis, culture is turning into a "global culture industry" prevailing a "mediation of things" (4), whereby objects themselves may "change" and be in "'transition' between many states" (19).

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Second, the qualities being valued in objects undergo a change. In late-modern, postindustrial economies, objects are valued not primarily for their functional qualities but for their symbolic-cultural value of, for instance, originality, authenticity, and exclusivity and, with the words of the German sociologist Andreas Reckwitz (2019), their appeal to "culture and psyche, experience [Erleben], cognitive abilities, emotions, identity" (150). These qualities in objects are not a given per se, but they are something "which consumers *ascribe* to them, respectively, *perceive* at them" (175, his italics). Thus, when objects get transformed in media, they also obtain an openness and flexibility to be ascribed new symbolic-cultural meanings. Meaning is being transferred to the object from the new meaning context.[30] This meaning may relate to the functional, "inner" properties of the object but is foremost attached to the surface appearance.

In this regard, a main difference between the two case lamps is that the FollowMe is designed for a late-modern media culture while the WG24 is not. Of course, the WG24 has been, from early on, continuously mediated. With the intention to iconize it based on its recognizable form,[31] the WG24 has often been photographed as a decontextualized, lone-standing object. In opposition, FollowMe almost seems to be designed to enter new and various media settings: to be transformed into an image. Obviously, it remains a functional and highly practical lamp, but it is also a lamp being massively promoted in settings attributing symbolic value to it—for instance, in images framing the exclusivity of dining at the brink of the sea (figure 4.4) or a promotional video with suggestive images oscillating between light and shadow, culture and nature, and a spoken discourse celebrating the metaphysical powers of light (Marset 2020). The effect of these settings is to encourage an aesthetic appreciation of the ability of the lamp flexibly to be transformed (e.g., as an image) and enter new meaning contexts. What is being appreciated is the ability of the surface to become transformed.

These six aesthetic categories are a proposal and do not exhaust all modes of aesthetic experiences in and through design. Nevertheless, they are proposed to describe aesthetic categories and thus experiences specific for design—that is, aesthetic experiences that originate in discourses on design and are attached to specific qualities of design objects such as form, function, and purpose. My approach of relating all the proposed categories to the two case lamps was undertaken not only to illustrate the theoretical

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points but also to point out that several aesthetic categories can be in play at the same time. For analytical purposes, then, the challenge will be to select the categories most apt: Which qualities of object x create an appeal to be aesthetically evaluated?

Aesthetic Categories Revisited

In this chapter, I have posed the question of what characterizes aesthetic experiences of design in a contemporary perspective. The answer is complex and has called for combining philosophical-analytical concepts and historical-cultural contextualization, not least because design has changed, in objects and in discourse. In this way, I have proposed a series of aesthetic categories specific for design that in various degrees actualize the sensual and conceptual dimensions of aesthetics while being framed by contextual concerns.

In this way, my intent is to widen the perspective on aesthetic experiences in accordance with the specificities of design. Thus, my aim is to produce insights that are productive when we evaluate design aesthetically and that take design into account as a multifaceted, complex media of our times. At the same time, reversing the perspective, aesthetics is not only productive for looking at design, but design is also productive for aesthetic theory in conceptualizing new kinds of aesthetic experiences. Design is more than ever a central case for aesthetic theory and aesthetic evaluation. Consequently, Forsey (2013a) and Feige (2018) too view their investigations of the aesthetics of design as a contribution to their philosophical disciplines.

Regardless of the anchorage in disciplines, it is important to look at how design affects our aesthetic experience and what we experience as "aesthetic." How this specific aesthetic experience unfolds in different contexts is the subject of the second part of the book on implications, where I will go into case studies of design practice (chapter 5), digital design objects (chapter 6) and the construction of aesthetic perception in a cultural context (chapter 7).

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II Implications

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5 Negotiating Aesthetics in Design Practice

In philosophical tradition as well as in cultural studies, aesthetics is investigated as a quality to be detected and scrutinized in objects with a definite manifestation in the world. This approach resonates with my phenomenological starting point. Aesthetics is important to understand to be able to grasp the complexity in design for setting the stage for our being in the world. But what about *aesthetics in the making* and as part of a process of creating the objects that set the frame for human experiencing?

In this chapter, I investigate aesthetics from the perspective of design practice. In the making of design, designers work to balance and incorporate aesthetic concerns in design solutions that start out in the not-yet-existing and in a process of becoming eventually turn into a new manifestation in the world. But just as the concept of aesthetics is slippery due to the "location" of aesthetics in a complex relationship between a perceiving subject and a coded object (cf. chapter 3), so aesthetics may appear even more difficult to grasp as a part of dynamic design processes.[1] Even if the word "aesthetics" is seen as integral to the design profession as a part of its toolbox and is effective as part of a social communication in design communities, what aesthetics is (in definition) and what it does (in effect) often remain unclear.

Method

In the literature on aesthetics and design practice (see also chapter 2), the focal point is often how to design for specific, mostly positive responses among users and consumers—for instance, by seeking the "pleasurable" effect of design (Jordan 2000; UMA 2017; Berghman and Hekkert 2017) or describing aesthetic strategies to evoke different kinds of positive effects,

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such as the pleasure of confirming the familiar or obtaining the unfamiliar (Harper 2018). My approach poses a contrast in that the primary interest is not which effects are to be obtained by the final object or product but rather how aesthetic parameters and concerns are being *negotiated in the design process*. Neither will I privilege the aesthetic intentions of designers, as these can be arbitrarily articulated with different, even contradictory formulations of aesthetics (cf. Stockmarr 2014). Instead, I shall focus on structural aspects of the design process.

My method for investigating aesthetics as part of the design process is to take material *prototypes* as vehicles for the integration and negotiation of aesthetic concerns. Prototypes have many forms and play many roles at several stages in the design process. Or, stated in a reverse manner, design processes nearly always involve working with prototypes as a means of concretizing the solution-to-become. As material elements in and manifestations of the design process, prototypes are apt for investigating aesthetics in its sensual, conceptual, and contextual dimensions.

Building on the Old Greek prefix "proto-," which the dictionary defines as meaning "first in time" or "first formed", prototypes have the meaning of being the first materialization of the solution-to-become. On this basis, prototypes can be seen as material manifestations of an immaterial process pointing in two directions at the same time. In temporal-spatial terms, they point forward in the process to the solution of the finalized object while also pointing backward in the process to the initial openness of articulating problems and conceiving something new and not-yet-existing. Prototypes are born to be temporary representations of the solutions-to-become and are in this instance a means of trial-and-error. Some prototypes, however, may not be intended to lead to the realization of a final and perhaps marketable product—for instance, being "provotypes" inciting discussion (e.g., Stratos Group 2016).

Nevertheless, what interests me is how prototypes as an often integrated part of design processes are material artifacts open for negotiations of aesthetic concerns that may (or may not) ultimately be carried forward in the further process or even integrated in the final product. The temporariness of prototypes makes them suitable for examining how aesthetic concerns are being negotiated between initial ideas and final products.

My examination of aesthetic concerns of design practice falls in two sections. In the first section, I discuss conditioning factors in relation to

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designers, such as questions of "aesthetic latitude" and "aesthetic disposition." Next, I point to the role of prototypes for design processes and on this basis conceptualize them as media for aesthetic negotiations. This conceptualization will build on the framework of sensual, conceptual, and contextual dimensions of aesthetics introduced in chapter 3.

In the second section, I specify the discussion by examining how different aesthetic modalities are present in prototype work and how these modalities are being negotiated. This examination draws on the framework of aesthetic categories introduced in chapter 4. Here, I will investigate aspects of "functional realism," "formal simplicity," the role of surface qualities, and the purpose and effect of experimentation and relate them to the work of four case designers. In turn, I will also argue that these categories may be employed actively in the work of designers to incorporate aesthetic concerns in the process and ensure new experiences with the resulting design objects.

The four designers span from novice to expert designers, all working extensively with prototypes as part of their practice. Before I introduce them, let me add that my analysis is biased. All the designers work primarily with material-tactile prototypes, they are Danish, and they confirm in various degrees a kind of design culture where the artistic element is of high priority. My intention is, nevertheless, to discuss the negotiation of aesthetics through prototypes in a way where this knowledge can be transferred to other design contexts.[2]

Aesthetic Considerations

How designers conceive and integrate aesthetic concerns in their work is a riddle almost impossible to solve. Even if the design literature is full of proposals of how to "demystify" the design process and the presumed specific cognitive abilities of designers (e.g., Lawson 2005; Cross 2007; Dorst 2006; Lawson and Dorst 2009), and the concept of "design thinking" has entered disciplines within and outside the design communities (Kimbell 2011; Engholm 2020; Ghassan 2022), and creativity has been integrated into the discourse on designing (cf. Tschimmel 2009; Tschimmel and Providência 2019), we nevertheless cannot directly describe what is going on in the heads and minds of designers and accurately grasp all motivations, thoughts, aims, ambitions, and dispositions. What we can do,

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however, is to describe and conceptualize *conditioning factors* of not only the design process in general, which is done by the vast literature on design processes, but also of the work with aesthetic concerns. This last aspect of design practice has been the object of very little analysis, probably because of its illusive character.

My entry into describing conditioning factors is influenced by what the philosopher Peter Murphy (2017) has called an "aesthetic epistemology" of design. By this he means a knowledge of "the act of designing" (118), especially in relation to the organizing and synthesizing powers of imagination that coalesce opposites and let sensual matter and conceptual frameworks meet in new ways.[3] Whereas Murphy looks broadly and historically at epistemologies of design,[4] I will rephrase the meaning of a specific *aesthetic* epistemology of design. In my definition, it is knowledge of how *aesthetics, in acts of designing, is a central means to constructing meaning at the intersection of sensual, conceptual, and contextual concerns*. In this process, aesthetics is by no means a process of styling or of sugar coating sensually appealing artifacts; rather, it operates as a production of new "categories of recognition and reality" (Welsch 1996, 45; see also chapter 3) through which objects relate to the world by creating frames for experience.

Thus, when we cannot see inside the head of designers (beside the impossibility of doing so, such an approach would build on a problematic assumption that designers have special cognitive abilities), what we can do is to investigate the unfolding of aesthetic epistemology. In the following, I will describe two formative components of this process: on the one hand, conditioning factors on behalf of designers in the "aesthetic latitudes" based on "aesthetic disposition," and, on the other hand, material tools or devices through which aesthetic concerns are being negotiated (figure 5.1). Regarding the latter, I have, for heuristic purposes, chosen to work with artifactual prototypes, as they are materially close to the final objects. Consequently, I have delimited the analysis from a treatment of drawings and sketches, either analog or digital, even if they also could have been relevant to investigate as part of the design process.

Latitudes

Being a futile task to comprehend all possible approaches to working with aesthetics among (all) individual designers, I instead describe central structural conditions for the engagement with aesthetic concerns. In doing so,

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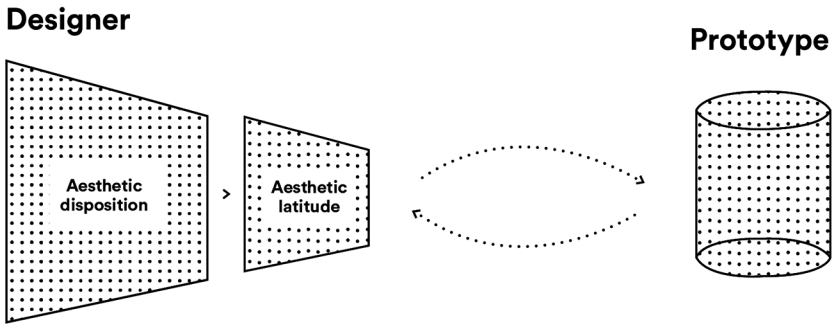

Figure 5.1
Model of constitutive factors of negotiating aesthetic concerns: aesthetic dispositions and latitudes in reciprocal interaction with designed prototypes. Drawing by Johanne Ib and Anne Laustsen.

my ambition is to present a conceptualization wherein designers can reflect their own practice. Furthermore, this conceptualization serves as a background for the analysis of the modes and roles of prototypes for the negotiation of aesthetic concerns, which is my primary purpose.

As the most overtly present aspect in the design process, *aesthetic latitude* designates the range and scope of aesthetic concerns at play in the concrete design task to be solved or dealt with. What is allowed and how freely can the designer work? As a concept, aesthetic latitude has been suggested by the Danish design researcher Vibeke Riisberg (2006) to describe the range of artistic freedom of designers in contrast to the constraints of the given task in relation to profession, market, and technologies. In her analysis, which is a part of an examination of the possibilities that digital inkjet printing offers for aesthetics, production, and business in textile design, Riisberg points out that "designers always act within some boundaries or constraints which set the frame for the 'aesthetic latitude' at stake" (23). This latitude "defines the limits for the production of 'new' artistic expressions" (73), the scope and limitation of which, ultimately, are what Riisberg aims to investigate. Hereby, she closely identifies aesthetics with the expression of the design in its visual and tactile appearance.

Within a company, the constraints may be the design brief, which may be fixed or open for experimentation (if the designer is demanded to deliver innovative solutions); the team of other designers and other professionals; the company profile; the market profile; and, in addition, what is not only

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economically but also technically feasible. If the designer works artistically freely, everything is, in principle, possible within an autonomous artistic space, but, as pointed out by Riisberg (2019), many designers will always have some kind of end-users in mind: "You can design everything, but what if people don't want it?" In any case, the concept of constraints, virulent in theories on design methods, can be productively employed to frame the aesthetic latitude of the designer; for instance, Lawson (2005) differentiates practical, formal, symbolic, and radical constraints, describing constraints in terms of technical feasibility, visual acceptability, expression, and overall purpose, respectively.

In her case of textile design, Riisberg (2006) differentiates between four kinds of designer roles with aesthetic latitudes in a span from bound conditions to freedom of artistic expression: (1) employed in-house designers who are part of a company team, (2) freelance designers working for companies but with their own signature, (3) designers manufacturing their own designs (thus to a high degree determining their aesthetic latitude), and (4) textile artists making designs for galleries (having the highest degree of freedom). Thus, the contextual setting always determines what designers can allow themselves to do in terms of working with aesthetic parameters along with parameters such as function, usability, technical feasibility, and economic concerns.

Conversely, the aesthetic latitude of a given task can be expanded by the designer when, for instance, the designer proposes new ideas and tests them at little cost with different tools, especially digital tools, which is a main interest for Riisberg. Furthermore, if the designer pushes the boundaries of a given task and proposes a design with a high expressive complexity, the literacy of the recipient may be challenged and productively expanded. In this sense, Riisberg conceives the "aesthetic latitude" to be flexibly situated between, on the one hand, the constraints that are almost always part of a design task and, on the other hand, the ability of the designer to work not only within the possible but also productively attempting to expand what seems possible.

Dispositions

Riisberg's identification of the aesthetic latitude with the freedom and range of *artistic* expression leads to the question of the underlying dispositions of this concept of aesthetics and, in general, what *aesthetic dispositions*

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are and which role they play. In brief, aesthetic dispositions describe the space of cultural, social, institutional, political, and economic factors that set the scene for what is regarded as aesthetic in a given context and that, in relation to designers, frame the space of aesthetic parameters to act within when designing. What are the reasons for designers to work with aesthetics in the way they do? We may pose questions of which concepts of aesthetics designers in specific contexts relate to, the origin of these concepts, and the conditioning factors. For instance, what role does "beauty" or "pleasure" (rather normative concepts) play? Is a more descriptive concept of sensual appeal being employed? And, further, does the concept of aesthetics employed relate to an art context or to other interests?

Institutional settings In the case of Riisberg, an underlying condition for her specific interest in artistic expression is the institutional setting of the Design School Kolding, which she is affiliated with as an associate professor, and in a wider context, the kind of design culture she participates in. The Design School Kolding is one of the two design schools in Denmark where the artistic element is a central part of the foundation of the school (along with other factors such as design research, adaptability of technology, and considerations of sustainability). Roughly speaking, training as a designer at this school is also about learning the means and expressions related to the heritage of design in the arts, especially regarding cultivating sensibilities toward formal and tactile appearances of design solutions and, further, working with artistic experiments in the tradition of the Bauhaus.[5] Additionally, the artistic aspect of design has traditionally been privileged and praised as a defining trait of Danish design, thus forming a key element in what loosely and without specific delimitation can be called a Danish design culture.

In this way, Riisberg (2019) points out how the school has foregrounded the experiment as part of the educational context. The experiment opens an autonomous space to be explored by artistic means in the educational tradition of the school. In her view, though, the work with experiments at the design school has over the years developed into a more framed setting, especially with regard to the commercial aspect of design: "A free challenge is a starting point to draw the design in various directions, also commercially." An example of how an "inner" artistic freedom at the school is being explored in relation to "outer" constraints of use and market is the annual collaboration with the shoe manufacturer ECCO, which puts its production

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facilities at the disposal of students to realize their designs. In groups, students are asked to start designing a "wild" solution and then, from this basis, to develop more "mild" solutions.[6] The "wild" solution is an experimental shoe without (or with few) constraints in terms of expression or feasibility of manufacture, whereas the "mild" solutions are shoes conceived to be manufactured and marketed. "The students explore different aesthetic latitudes dependent on different contexts" (Riisberg 2019). As part of the process, defining a range from the "halo" of the "wild" to the "hack" of the "mild," as in the SEALO project (figure 5.2), the students are encouraged to integrate their artistic ambitions into a marketable product. Hereby, the students are being socialized to work with different spans of aesthetic latitudes as part of their aesthetic disposition as designers and reach from the artistic experiment to the pragmatic solution.

The concept of "dispositions" relates to the sociological theory of Pierre Bourdieu (1994) as a way of describing structural factors that condition behavior, action, and interests of people in the contexts they are part of. Two concepts in Bourdieu's comprehensive theory are relevant in this context: habitus and field. By selecting these two concepts, my ambition is to underline the central claim that we can look behind the immediate action of designers and investigate structural traits that are formative for their approach to, in this context, the work with aesthetic parameters.

Habitus In this context, the *habitus* describes the way designers approach designing; that is, how they act when designing according to underlying modes and schemes in a cognitive as well as bodily manner. In Bourdieu's (1994) formulation, habitus is a system of dispositions that predisposes but does not determine 1:1, individuals to act, perceive, and behave in certain ways that, in comparison with other individuals, are "differentiated" but also "differentiating" (23). Habitus is, so to speak, a structural frame of distinction to act within and is being internalized and embodied in individuals through the process of socialization in the family, society, and various institutions, especially in education.

Specifically, in relation to designers, the habitus is shaped by educational institutions and the job market (cf. Cuff 1991)[7] as well by professional and popular discourse on design, framing what is being valued. On this basis, designers (individually, in groups, in firms) may form and consciously articulate notions of, for instance, the "core" of creativity (cf. Wang and Ilhan

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(a)

(b)

Figure 5.2
Project SEALO. (a) Example of the span of "mild" ones, at the bottom of the pyramid, and the "wild" one, at the top. (b) The studio photo of the final prototypes displays how materials from the sea surrounding Denmark are employed in the collection in a range from the "wildly" mode of openly showing the materials in the shoes to the "mildly" mode of less overtly visible way of integrating the materials in the shoes. Project and illustration by students Simone Olivia Bakke, Silke Foged, Niclas Jensen, Jeppe Aske Jensen, and Aurélie Varga. Kolding Design School, 2018. Photo credit: Michael Frederiksen.

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2009) and embody a "tacit knowledge" (cf. Polanyi 1966) inherent to the practice they are being socialized to be a part of. When operating as tacit knowledge, ways of working are not verbalized but nevertheless are effective for designers as cognitive and bodily dispositions. With application for the habitus of designers, the sociologist Andreas Reckwitz (2018) refer to "disposition of creativity" as a way of describing the tendency of late-modern societies to privilege the production of "the new," for instance, in the "creation of objects and atmospheres which affect senses and meanings" (16).[8] In Reckwitz's analysis, creativity is part of a societal condition; it is, on this basis, also an element to be integrated in the habitus of designers as part of education and training.

In the context of the Design School Kolding, aspects of working artistically and conducting experiments in the design process contribute to shaping the professional habitus of future designers. In addition, the school's value of creating "sustainable and inclusive solutions in a playful manner" (Design School Kolding 2020) may frame the values of future designers. Also important for socializing the habitus of future designers are mentors,[9] such as Riisberg herself, being a pioneer in Danish textile design, not only as an educator but also as a practitioner. Next to education as a core formative factor, the wider cultural context may be a contributing factor for the habitus of designers, as it sets a scene for what "design" means and is perceived as. In a Danish context, for instance, design is framed by developments in sustainability and responses to new societal challenges. But also, the tradition in "Danish Modern" for privileging formally reduced and simplistic solutions is an influence as something to be celebrated or to be rebelled against. Contextual factors such as these frame the horizon for designing for several of the case designers investigated below.

Field Habitus is a general and flexible concept for the underlying structural conditions for action, perception, and behavior. To narrow down its application, the affiliated concept of the *field* is relevant. In Bourdieu's theory, a field designates a microcosmos with a degree of autonomy where specific activities unfold, such as visual arts, literature, appraisal of garden gnomes, or design practice. The field is a structured "space of objective relations between positions, such as the positions of the consecrated artist and the damned artist" (Bourdieu 1994, 68). As well as being a structured space, where the "tension between the positions" is "constitutive for the structure

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of the field," Bourdieu's point is that the field is a *structuring* space for the actors within it, because the field offers "structured constraints" (72) for being in the field.

An analysis of the whole field of design practice lies beyond the scope of this chapter; Bourdieu's own field analyses are substantial and thus quite lengthy. But many of his proposed oppositions are informative for a generalized conceptualization of the field of design practice with relevance for the approach to working with aesthetic concerns. Bourdieu (1993) analyzes the field of art (in a French context) through tensions between positions such as autonomous versus heteronomous art, artistic freedom versus commercial art, avant-garde versus conservatism, high culture versus popular culture, and centrum versus periphery, but also as conflicts of generations. Several of these oppositions would be transferable in concrete investigations of localized design practices.[10] Here, I will point out two major opposing powers providing a macrostructure of a generalized field of design practice in relation to the negotiation of aesthetic concerns.

The first opposition structuring the field of design practice in relation to aesthetic concerns is part of Bourdieu's (1993) analysis of art: the "heteronomous principle" of submitting to market principles and the "autonomous principle" of advocating a domain of art for art's own sake and thus independent from economics (40). In the field of design, these two principles relate foremost to the intention of the designer designing either for the market or exploring design for design's own sake in creating a "work of design," which as a concept exists in close affiliation with the concept of the work of art (cf. von Oppeln 2011). Of course, most design will have a tendency toward the "heteronomous" pole of relating to the market, but the other pole of working autonomously in one's own designated space of designing is still important for the full range of design, from gallery design (where design is institutionalized in much the same way as art, thus being part of a "design-world" in alignment with the "artworld"[11]) to the employment of artistic means in processes of experimentation, where the designer may be in an artistic bubble in the process but employs this as a means to an end in creating new products. This method of working artistically in order to find new solutions can be seen in the working methods of several of the case designers (discussed below) but also in the notion of framing the experiment (and hereby instrumentalizing it) at Design School Kolding, as mentioned above.

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The second opposition concerns approaches to the design process. As pointed out by Ida Engholm and Karen Lisa Salamon (2017), the history of design methods can be characterized by two major trends. On the one hand, a discursive repertoire of design as "rational" planning was epitomized in the Design Methods movement of the 1960s and 1970s and has been a megatrend of design methodology in close affiliation with engineering ever since. Rational planning is also seen in the human-centered design field by integrating qualitative and/or quantitative data to support the act of designing.[12] On the other hand, a "romantic" idea of artistic creativity foregrounding intuition and experimentation has been prevalent in artistically oriented design education and practice with roots in the Bauhaus. In their analysis, these two trends conflict: "The idea of design as rational planning activity often clashes with artistically oriented approaches," which can be seen in the "increased academization of design schools [leading] to the marginalization of artistic and manual crafts skills" (Engholm and Salamon 2017, E1.1). The analysis confirms the dominance of rationalist approaches to design methods, historically necessitated by the urge to establish design as a scientific discipline of its own, at the expense of the "artistic" aspects of designing.

In the present context, these two conflicting meta-discursive trends in design methodology describe a polarity in the field of design practice between, on the one hand, confidence in rationalist methodology (leaving little room for the artistic and, hence in this context, aesthetic concerns) and, on the other hand, working methods relating to the artistic heritage of design (where experimentation and matters of form and expression are at the fore). Both ends of the polarity are something that designers, in general, are being socialized to, and both ends are, on a concrete level, present in the curriculum of Design School Kolding, where they often unfold in mixtures in the mentioned concept of framed experimentation as part of a rationally progressing design process.[13]

These two proposed polarities may suggest a way of proposing a structure for how designers relate to the artistic tradition within design and, consecutively, work with aesthetic concerns.[14] Are the design objects regarded as artlike, autonomous objects not necessarily intended for a market, or do they gain their entire meaning from their relation to the market? As stated, most design objects relate to markets, but in the design process, they may be worked on as if they were autonomous creations. Further, what type of

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method frames this work—artistic experimentation or rational planning—to take the extremes of a spectrum of methods? Ultimately, Bourdieu's central point is that participants in a field must submit to the structural conditions of the field to be part of it. The proposed polarities may be one way of describing the structured as well as structuring space of possibilities of working artistic-aesthetically that designers consciously relate to and also may internalize as part of their professional habitus.

Prototypes

With the concepts of latitude and disposition as a background for working with aesthetic concerns in design processes, I want to present prototypes as a means for negotiating these concerns. My working definition of prototypes aesthetically viewed includes the following:

- Material artifacts of the design process, proposing, probing, and negotiating the sensual appearance of the design
- The relationship between this appearance and the conceptual idea content of the design
- The role of contextual factors relevant for the aesthetic appreciation of the design object.

To narrow down what this means, I will look at central traits of prototypes conceptualized in design discourse[15] and relate them to the aspects of the sensual, conceptual, and contextual.

Negotiating aesthetic coding First, prototypes are relevant for an investigation of the aesthetics of design because they are material and overtly conceptual at the same time. In their materiality, they are used to explore the sensual appearance of the design object while testing the function and meaning of the object. At the same time, prototypes are in their materiality to be taken literally as the "first formed"—that is, as a primary object of the design process and "as parent" (Valentine 2013, 9) of the design—much in the same way that the plaster version of a marble statue is the first and, hence, original version of the statue. On the other hand, prototypes are part of a design process that makes them preliminary, transitional, and provisory objects and objects for conceptual exploration. They are a means to explore the possibilities of the final design to be developed but not identical with this object, whose precise character at the stage of prototyping is not yet (fully) known. As mentioned, some prototypes are not indented to be

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provisional but remain "prototype-as-products," for instance, to serve as a "vehicle of communication," which can be seen in the context of Memphis Design (cf. Rossi 2013) or critical design (cf. Dunne and Raby 2013).

Thus, prototypes have meaning by being transitional, conceptual investigations as part of a process *and* at the same time being material objects of their own kind. This double character is reflected in design discourse.

On the one hand, prototypes deal with possibility, ideation, exploration, process, and activity; hence, the conceptual element of design objects. Prototypes are "a language, process and tool for progressing ideas towards a useful goal" (Valentine 2013, 8) and function as "conceptual objects—a means of ideation" when they act "as both a proving ground and a point of reference for the rest of the design process" (Adamson 2013, xiii–xiv). With reference to Anthony Dunne (2005), Hazel White (2013, 75) claims that prototypes may even function as "genotypes" by representing and refining the core of the idea of a product. In addition, prototypes may enjoy status as "epistemic artefacts" operating as a means of facilitating and developing a theorical discourse on design practice (Hansen 2009).

On the other hand, the materiality of prototypes plays an important role, as this affects and anchors the design process and, furthermore, has changed historically according to design paradigms and technology. While Glenn Adamson (2013, xiv) highlights the material-tactile element by claiming that "most prototypes are made by hand" and thus "represent the artisanal dimension of the design process," Elizabeth Sanders (2013, 62) points to the history of working with prototypes as they have changed from being slowly manufactured "look-alike models with rich visual detail" representing the almost finalized object to rough and rapidly made models enabled by technologies such as computer-aided design (CAD) and 3D printers. In Sanders's analysis, this change in materiality has also been followed by a change in function of the prototype from being a means of envisioning the possible to making sense of the future in "exploring, expressing and testing hypothesis about future ways of living in the world" (64). Thus, the specific character of the prototype matters for the ideation process; prototypes are, in the words of Michael Schrage (2013, 19), "cultural artefacts" bearing the mark of their time and affecting how ideas are generated through their materiality and technology.

In terms of aesthetic concepts, prototypes bring the conceptual dimension to the fore while at the same time displaying how ideas depend on

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their sensual incarnation of the material artifact. Being preliminary forms, prototypes reveal how ideas are being and can be materialized in multiple ways. Ultimately, the concrete materialization of an idea is arbitrary and can be tested by the prototype. When critical designers Anthony Dunne and Fiona Raby (2013) state that conceptual, "critical design is critical thought translated into materiality" (35), this implies that a material presence is the unavoidable condition for uttering this thought if it is to have any impact, for instance, in the opening of "all sorts of possibilities" (6) through proposing scenarios. Because prototypes are (mostly) provisional objects negotiating ways and means of the design object-to-come, they foreground how concepts are being materialized and how the materiality affects the conceptual content of design. In relation to my framework of aesthetic dimensions of design (cf. chapter 3), this negotiation is a matter of *aesthetic coding*: how sensual and conceptual aspects relate to each other.

Concretizing abstract ideas Second, prototypes are means for negotiating the relationship of abstract ideas and concrete materialization. This aspect follows from the first point of the relationship of sensual and conceptual dimensions but is worth stressing as its own point. Prototypes make clear how design always is a negotiation of the abstract meaning of the general "type" of the object in question (e.g., "vase", "drinking glass", or "chair") and the concrete materialization and realization of the type in the specific object.

In the history of design, especially in modernism, attempts have been made to distill types of objects and reduce them to basic characteristics; consider, for instance, the idea in the 1920s and 1930s to developed a standardized, abstracted, and easily recognizable pictural language under the name ISOTYPE or Le Corbusier's proto-utopian concepts of the "object type" and the "standard" as optimal entries to mass production (cf. Schwartz 2013, 118). The search for the abstraction of pure typology has, however, proved to be an ideal ambition never to be fulfilled and belongs to the historical past of design. In this context, my point is that prototypes in their negotiation of abstract and concrete, conceptual and sensual, at one and the same time let them stand out as polarities in the design and attempt to let them meet and be merged in new ways.

Contextual concerns Third, prototypes are increasingly vehicles for collaboration about the design. Whereas the first two traits deal with the isolated ontology of the prototype as an object, the collaborative aspect points to

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the contextual circumstances of creating and working with prototypes. On this point, the prototype has undergone a change from being an object that in a closed dialogue "talks back" to the designer, to employ the words of Donald Schön (1983), to be a "shared model" of what-will-become involving several stakeholders in a process of co-creation (Binder 2010). In employing a theatrical metaphor, the classic notion of seeing the world as a stage, *theatrum mundi*, is being reversed, and the prototype is seen as the stage, where matters of the world are tested through scenarios as a "rehearsal of new practices" (180). Thus, prototyping is seen as "acting out" in shaping the things that enter the stage as "props" evoking "new ideas" and guiding "the improvisation of possible scenarios" (180).

The broadening of the prototype as a tool for dialogue, from being an instrument for the sole designer to being a tool for co-creation inviting all kinds of stakeholders (foremost users, however) to participate and contribute, has followed the development in design practice from being an elitist phenomenon among a small group of professionals ("designers") to being an invitation for participation. A further contributing development has been the expansion of design into a broad concept to be applied in all sorts of development processes through the concept of "design thinking."

In the context of aesthetic theory, though, the collaborative aspect of working with prototypes raises a different question than how the field of design has changed. Instead, the focus is on how experience is enabled through the prototype and which actors have contributed. Thus, the collaborative aspect of prototypes puts at stake the political power issue of the "distribution of the sensible" (cf. Rancière 2004; chapter 3). Which elements of the design are emphasized and made present for sensual experience and conceptual reflection, and who is to decide in the process of doing so—"expert" designers or stakeholders such as layman contributors? In its essence, though, the prototype is an integral part of the professional toolbox of the designer, but it is also, at least in collaborative processes, a place for negotiating what the design is about and how it ideally should frame experience.

Thus, in the prism of aesthetic reflection, collaborative processes are not only an innovative mode of design methods to ensure the optimum solution. Instead, they are a reflection within the contextual dimension of aesthetics of how the design object operates aesthetically, how it is positioned as "aesthetic," and, importantly, who contributes to this process.

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Prototypes, dispositions, latitude In sum, *prototypes* enable a negotiation of aesthetic concerns in several ways: by being material and conceptual at the same time; by being proposals of how abstract types of objects gain concrete manifestation; and by being mediums for collaborative processes of negotiating the meaning of the design. The work with prototypes is conditioned by the aesthetic dispositions and latitudes of designers. The *dispositions* are underlying conditions for how the role of the prototype in the design process is perceived as well as how the actual work with prototypes is conducted and, in general, how design as such is perceived. And, on a more operative level of the design task in question, the aesthetic *latitude* sets the frame for how to approach the task.

As indicated by figure 5.1, the interaction is reciprocal between, on the one hand, latitudes and dispositions and, on the other hand, prototypes. The designer's work with prototypes is not just conditioned by dispositions and latitudes. As new material creations, prototypes can obtain their own and even unexpected agency, which may affect not only the latitudes but also the dispositions of the designer. The point is that prototypes are not simply predetermined by the designer's prerequisites. Once placed in the world as proposals, prototypes have agency as independent entities pointing into the social context of design practice, which, in turn, may affect the prerequisites of the individual designer.

Aesthetic Negotiations

Dispositions and latitudes operate silently as conditioning factors and set the scene for the work with the prototype as the medium of negotiation of the *sensual appearance of the design, its conceptual idea content, and the influencing contextual factors*, to recap my working definition of prototypes viewed aesthetically. As a next step, I will examine how aesthetic negotiations take place using the case of four designers. I have conducted interviews with the designers about their work with and approach to prototypes. The question is not whether these designers intentionally have positioned their prototypes to be a "medium of aesthetic negotiation" but how aesthetic modalities in relation to different aesthetic categories are being negotiated through their work with prototypes.

Heuristically, I organize this case material into three subsections according to the aesthetic categories that are at play in the analyzed designers'

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work with prototypes and, with wider implication, in prototypes as mediums for aesthetic concerns in general. These subsections deal with (1) categories of "functional realism" and "formal simplicity," both relating to design modernism and fundamental, ontological questions of what design objects are; (2) the role of surface qualities in relation to the category of "semantic reference"; and (3) the role of "artistic experimentation," not only as part of the work with prototypes but also as an element of their design practice. Figure 5.3 offers an overview that, furthermore, may function as a tool for designers to reflect aesthetic concerns in their work. The mentioned aesthetic categories are fully explained in chapter 4, but I summarize them below.

The structure of the three subsections implies a deductive argument of ordering the material according to theoretical divisions. At the same time, however, the case material is not just a sheer illustration of theory but will, in its abundant material-tactile (aesthetic) texture, exceed the theory with the potential to point theoretical assumptions in new directions. My

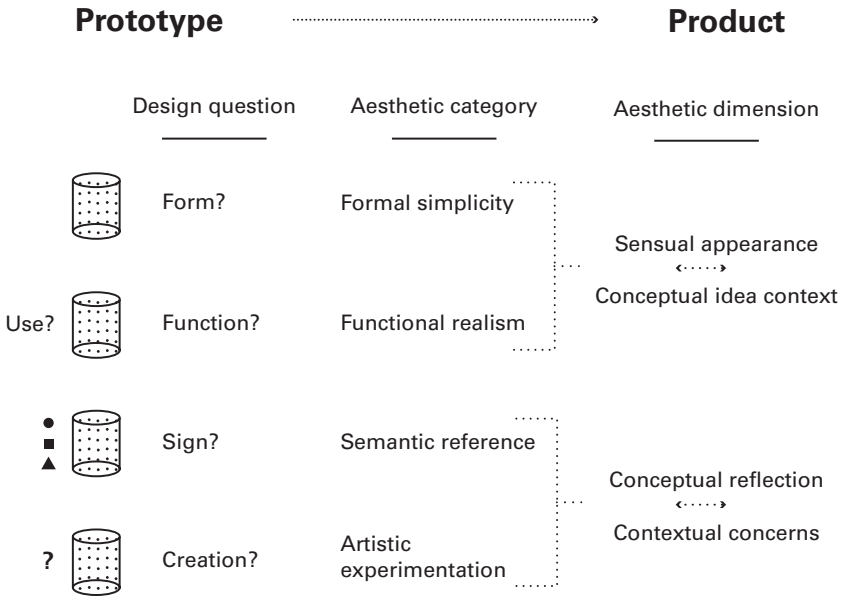

Figure 5.3
Overview of the influence of aesthetic categories on the work with prototypes: design questions of form, function, sign value, and mode of creation. Drawing by Johanne Ib and Anne Laustsen.

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methodological point is that theory and concrete case material cross-fertilize. The theory of the aesthetic categories may point out something in the concrete material that otherwise would not be seen (or was not intended to be seen), but the material cannot be reduced to theoretical points and may even enrichen the theory.

Form and Function

In the modernist credo of design, function and form (and their mutual relationship) are of primary concern. In chapter 4, I argued that this focus develops into two aesthetic categories. "Functional realism" privileges honesty and directness in the appearance and communication of the design as modus for aesthetic appreciation. "Formal simplicity" foregrounds the ability of the form of the design to communicate, carry information, and ultimately, reduce complexity, whereby the aesthetic appreciation in this category encompasses simplicity, minimalism, and purity in the object. Form and function are thus central entries to appreciating design aesthetically.

Form reflecting function The main case in this subsection is the designer Cecilie Manz, who in her work explores the expression of form and how form relates to function. She is a renowned Danish designer working mostly with design for the domestic sphere (see Ceciliemanz 2020). Originally trained as a furniture designer, her work has expanded from this domain (e.g., chairs, tables, and daybeds) to products such as tableware, lamps, electronic devices, and objects for storage.

Within the field of Danish design culture, Manz works mainly according to the "heteronomous principle" of commercial projects. Manz (2020) states that designers are not floating freely but always have "industry as partners because we need to be part of a corporation." At the same time, she insists on adhering to "autonomous" strategies of working independently and artlike where, for instance, only every second prototype is being developed into a product. In addition, an amount of work in the studio is dedicated to experimental prototypes for the sake of the experiment alone, not for a client. Manz's work carries traits of being designed by a "star designer" (and in a Danish context, she is just that), where the designer with her name and specific formal signature always is present in the design and can move her (artlike) strategy to various categories of design.[16] According to Manz, all of her work contributes to "an ongoing story" in which all her designs are interrelated and belong to the same narrative.

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Several of Manz's designs appear as formally closed entities that can be aesthetically evaluated for their ability to offer a reduction of complexity in an expression of formal simplicity. This feature can be seen in the designs I choose for examination: *Gateau* (figure 5.4), a 2018 design that is a "place to rest jewelry or cakes" (Ceciliemanz-Gateau 2020), and the series of portable loudspeakers for the Danish high-end consumer electronics company Bang & Olufsen (B&O), foremost the 2018 *P6* model (figure 5.5) but also the 2017 *Beolit 17* (figure 6.1; cf. chapter 6). In these objects, the formal simplicity is taken to a point of abstraction, where the idea qua function can be difficult to detect. The cake centerpiece appears as a pure geometrical construction, and the portable loudspeakers seem like enigmatic blocks hardly revealing any intended purpose. In this way, the formal abstraction of the objects works against an aesthetic appreciation through the category of functional realism; by veiling the function, or not overtly displaying it, an honesty of expression of function is not of primary concern—the objects do not elicit an aesthetic appreciation of this kind. Instead, they operate with an aesthetic coding staging an indecisive interplay of sensual appearance and conceptual "idea," at least at an initial stage of perception. What the objects

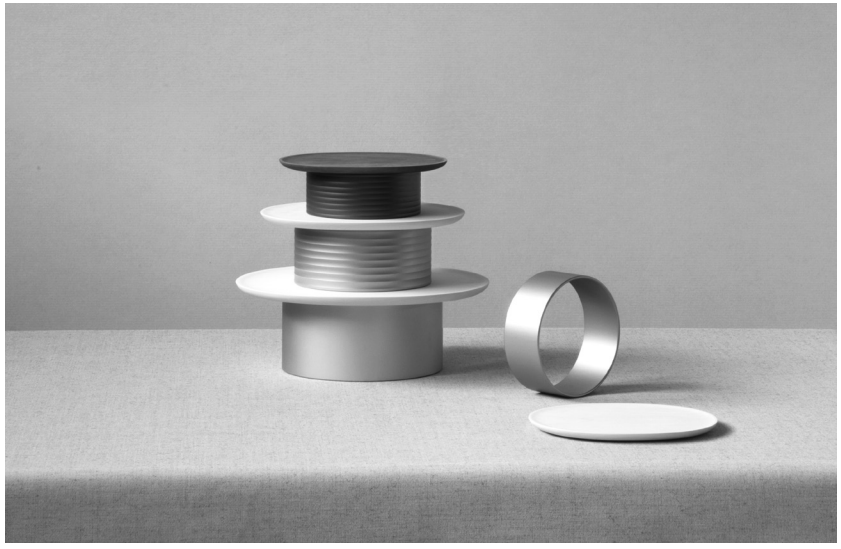

Figure 5.4
Gateau: solid maple and pearl anodized aluminum. Design by Cecilie Manz, 2018. Photo credit: Cecilie Manz Studio.

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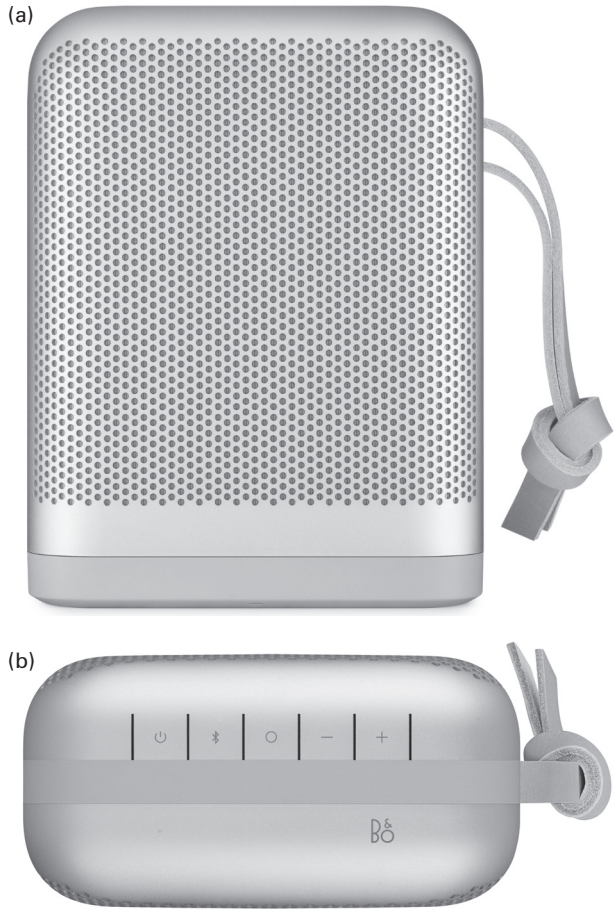

Figure 5.5
P6 portable Bluetooth speaker in pearl blasted aluminum and polymer with leather strap. (a) Front view with aluminum grid and (b) top view displaying the simple interface. Design by Cecilie Manz, 2018. Manufactured by B&O Play. Photo credit: Bang & Olufsen.

elicit is an aesthetic appreciation partly due to their formal simplicity and partly due to their ambivalence of form in relation to function: What are these objects for?

In Manz's work, the relationship of form and function is largely negotiated in the prototypes prior to the final objects. Her method is to work with tangible and tactile means of prototyping, such as paper and models, and not with digital renderings. A central tool in the initial phase is a sectional

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drawing and side elevation view, where the transition from a 2D representation on paper into a 3D object is envisioned and prefigured. She is, though, not averse to digital technology, only skeptical about its role in working with and representing design: "Maybe the design profession has become too digital and focused on media; what is important, however, is to control the story" (Manz 2020).[17] In her studio, however, an assistant works with digital tools.

In general, Manz considers her work with prototypes to be a dialogue about the *openness* of the developing prototype and the *closure* of the object that is finalized at some point. In her view, the work with prototypes takes place on a spectrum of exploration and continuous optimization. In working with CEOs and product managers, Manz (2020) points out that they often focus on how the prototype may turn into a marketable product, while she maintains the "designer's perspective" and "keeps the prototype open for investigation as long as needed." These two perspectives allow two different kinds of object perception, potentially present at the same time. The focus on the prototype as a preliminary version of the final object gives way to a goal-oriented perception of the object as concrete entity vis-à-vis product, which may elicit aesthetic appreciation, while the gaze on the prototype as open for investigation lets the abstractness of the object idea remain present in a perception of the virtual potentials of the object. She nonetheless points out the vital importance of the initial drawings as well. They testify to the initial idea for the design in question because, "when the process starts, many parts become involved and my job is to keep the common thread" (Manz 2020).

In the case of the P6 portable loudspeaker, the prototypes appear as experiments with pure form balanced with the tactility and the texture of different materials (figures 5.6 and 5.7). Hereby, the prototypes testify to a division of work between the technical department at B&O taking care of internal, technological parts and Manz being responsible for outer form and appearance. In fact, the brief from the company made a clear demarcation in terms of a defined volume, which according to Manz (2020) led to working with blocks and a process of "finding the right proportions through modeling—that is, in reality making sponge cake." Still, the "inner" functionality and the "outer" form must ultimately be integrated for the device to work. On a concrete level, the aluminum grid at the surface must be designed to allow sound to be transmitted without distortion or vibration (figure 5.8); it is not enough just to look good or confirm the company's design idiom of

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Figure 5.6
Prototype models of P6. Design by Cecilie Manz, 2018. Photo credit: Cecilie Manz Studio.

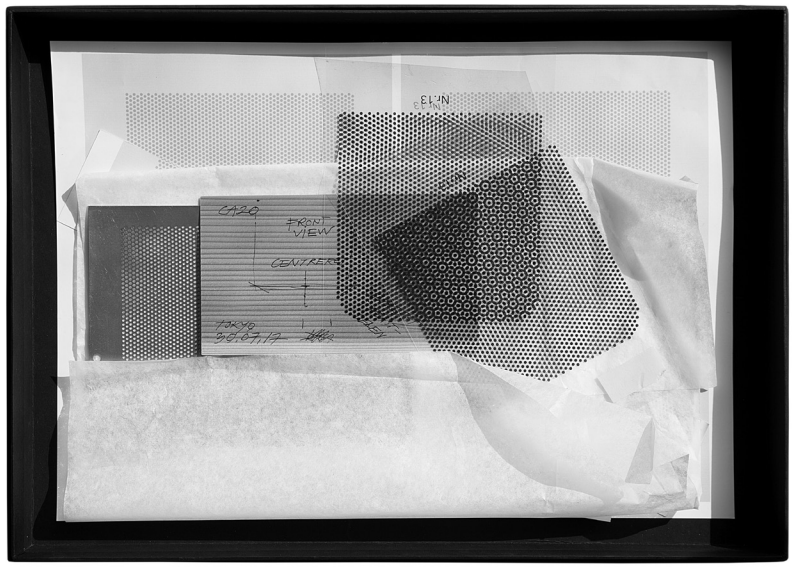

Figure 5.7
Texture samples for the surface of P6. Design by Cecilie Manz. Photo credit: Cecilie Manz Studio.

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Figure 5.8
Material samples for the surface of P6. Design by Cecilie Manz. Photo credit: Casper Sejersen.

using aluminum. Nevertheless, the brief for Manz has been to work within the volume boundaries and, on this basis, explore the visual and tactile appearance of the speakers.

In general, Manz (2020) says her method is to work "from the inside and out" and to work with "clear ideas and tight aesthetics." An element of this is working toward "the pure aesthetical object," which in her view means an object with a clearness in form and appearance as well functional performance and which Manz, furthermore, sees in the light of the "ongoing story" of her designs. Thus, the portable loudspeakers for B&O are not just connected to other products by that company but also to Manz's other designs, such as *Gateau* or her many chairs; they all share a kind of "Manzian" quality in their way of negotiating and thus balancing form and function. In her view, all design needs to be functional to be "design"—and

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"aesthetics," which she hereby considers to be the appearance of the object, "is not to be made independent of this."

In the light of this conception of aesthetics, the prototypes of P6 seem not only to be explorations of the sensual aesthetics of a portable loudspeaker's texture and visual appearance but also attempts to try out, on a conceptual level, how the idea of the object qua function is communicated in a balance between being enigmatically hidden or overtly revealed. As aesthetic coding, the prototypes test the readability of the sensual aspects of the objects regarding their conveyance of function; that is, should the objects appear as mysterious blocks of form offering sound, or should they offer basic features for recognizing their basic function and, hence, their product type as a "portable loudspeaker"?

How the P6 relates to the conventions of the product type is a matter of the contextual dimension of aesthetics. The recent tendency within the product type of portable loudspeakers has been to reduce the buttons of operation to a minimum as a response to the advent of wireless digital technologies and the subsequent operation of the loudspeakers through devices such as smartphones (see also chapter 6). In this sense, the P6 loudspeaker is very much in line with the aesthetic norm of its time, even though it takes the abstraction of form to an extreme. Hereby, it elicits an aesthetic appreciation related to the category of formal simplicity, which, furthermore, points to design idioms of B&O and of Danish design. The product is to be appreciated for its ability to be reduced in complexity as much as possible and to adhere to the taste norm of Danish design.

A different strategy of working with prototypes can be seen in relation to *Gateau* (French for cake). The product is not defined by a brief of a client but is one of the studio's own projects. Whereas the portable loudspeakers (and their prototypes) are entities delimited by outer extension of form and volume, *Gateau* is characterized by an open, flexible structure where parts can be assembled in multiple ways through use of layers and connecting rings. With this flexibility, the distance from initial prototypes to the final product may not seem that far and may be mostly a matter of detailing and completion, as illustrated by the suggestive installation made by the designer herself (figure 5.9). In its essence, *Gateau* is a play of form and function: how basic elements of form (circles and cylinders) in assembly may have a function or, conversely, how functions (in being a

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Figure 5.9
Prototype samples for Gateau. Design by Cecilie Manz. Photo credit: Cecilie Manz Studio.

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centerpiece for cakes and jewelry) can be reduced to basic elements of form. We may even say that the object contains an unresolved tension of form and function because we may detect its quality of formal simplicity but not its relation to function, let aside the possible quality of functional realism. The final product may seem finalized in its components, but the unity of these components remains abstract, and hence the final object has a kind of preliminary prototype character.

Through this constitution, the object is intended to incite the user. On the one hand, Manz (2020) has aimed for a "harmony" of the object and to let the user be moved by it; on the other hand, it should awake curiosity and challenge the user's perception to the verge of irritation. It is an object that should attract and repel the user at the same time, to let her be fascinated by it while being defamiliarized by its abstract and preliminary, prototype-like character, thus encouraging a reflection about its being as object.

In this way, *Gateau* should encourage an aesthetic appreciation equally based on sensory perception and conceptual reflection. This also leads to a reflection of the purpose of form and function of the object entailing a reflection of the object within the aesthetic categories of "formal simplicity" (what are the forms for?) and "functional realism" (which function is being expressed?). In this process, these categories do not silently operate as vehicles for aesthetic appreciation of form and function but are open for a reflection. In general terms, Manz (2020) describes her design process as led by a "fog of the aesthetic where you know that eventually, the openness will close at some point"; in Gateau, a part of this "aesthetic fog" remains present in the finalized product.

Exploration of tactile sensation A different approach to prototypes is represented by the work of textile designer and design researcher Louise Ravnløkke (2019), who conducted a PhD project on "knitted prototypes as a tool for user dialogue in the design process" at the Design School Kolding.[18] While prototypes for Manz mostly are a means to an end (the product), prototypes are Ravnløkke's primary object of investigation. Broadly speaking, Manz designs for the market in collaboration with companies, whereas Ravnløkke explores exemplary aspects of prototypes within a sphere of investigation without market test. Her interest is to examine the role and value of prototypes as a means for engaging in a dialogue with users about products, which in her case are knitted jumpers. In the perspective of my analysis, Ravnløkke's experiments display a different kind of negotiation of

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aesthetic appreciation, as she points to the role of tactile sensation instead of form and to the involvement of users in articulating this.

Seen on its own terms, Ravnløkke's project is ideologically carried by an agenda of sustainability. Ultimately, the users are engaged in the design process to meet their aesthetic preferences, heighten their satisfaction with wearing knitted jumpers, and consequently, further an emotional durability of the product. The assumption is that the emotional attachment ensures the lifetime of the jumpers is prolonged and hence they become more sustainable.[19] In addition, sustainability and economy are considered in the production aspect of the design as explorations of how the jumpers can be based on one single kind of yarn in different colors. This choice still provides a high degree for design variation of knitted surfaces and a vast number of aesthetic expressions through combinations of the yarn and the color palette.

In the research process, Ravnløkke employed prototypes as a dialogue tool with users at several stages. Accordingly, different kinds and modalities of prototypes have been in play. Initially, samples of materials were tested with users, which led to the development of a design concept consisting of knitted prototypes, choice of colors, and basic jumper models (figure 5.10). Subsequently, uniquely knitted jumpers regarding fit and choice of details were codesigned with selected users to test if their engagement in the process would increase their attachment to the jumpers. In this sense, the knitted jumpers are not finalized as products but operate as fully functional prototypes as part of the research process. An example is the jumper manufactured for the participant Pernille. This jumper has a clear differentiation of body part and sleeves in the knit structure (figure 5.11). In this way, Ravnløkke ascribed the role of prototypes to samples of materials as well as full-scale jumpers customized to specific users.

On this basis, Ravnløkke's prototypes have less to do with visual form than with tactile sensation, regardless related to the materiality and texture in the material samples or the overall bodily sensation of the full-scale prototypes. Dealing with tactility of soft and flexible textile materials, her project contrasts not only the modernist canon of hard, industrial materiality but also the visually dominated field of fashion.[20] Wearing clothes entails, though, a complex sensation involving several senses and perspectives. Clothes are tactilely felt both from the inside by the body and visually seen from the outside when watching oneself in a mirror,[21] and even if fashion is dominated by visual perception, tactile sensation is not excluded from it.

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Figure 5.10
Design concept: knitted prototypes, choice of colors, textures, and style of jumper, 2019. Design by Louise Ravnløkke. Photo credit: Mia Mortensen Photography.

Taking the materiality and texture of textiles as a starting point, Ravnløkke (2020) nevertheless aims to investigate users' aesthetic appreciation based on the tactile sensation of the knitted texture and, as a next step, adds their visual perception of the jumpers when wearing them: "By engaging sensually with the samples, the users could start talking about them and thus articulate their otherwise tacit preferences, which for several of them were rooted in a frustration with low-quality textiles." As "media of articulation," the prototypes led to "the development of parameters such as *visual expressions*, *jumper style*, *proportions and fit*, and *material*" (her emphasis).

In relation to kinds of aesthetic appreciation, two key insights can be gained from Ravnløkke's project. First, users can play active roles early in the design process by articulating what they perceive as aesthetic preferences. A complexity faced and explored by Ravnløkke is the limited vocabulary users may have when articulating their preferences.[22] Part of her project is thus aimed at empowering users and qualifying their understanding of aesthetic preferences and, as a next step, letting them contribute to creating the design options they can choose from. A normative focus of her project is, then, to

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Figure 5.11
Prototype based on design concept for knitted jumpers, 2019. Design and photography by Louise Ravnløkke.

teach users a language and an awareness of especially tactile qualities of knitted textiles and hereby contribute to moving the appreciation of textiles from visual appearances to qualities of fibers and affiliated tactility of textiles.[23]

Second, aesthetic appreciation through tactility is important to acknowledge. In taking one quality of yarn as the starting point, her project reduces production complexity yet offers a wide range of material expressions and is hereby related to the category of "formal simplicity." Her formal simplicity is, however, not a question of visually communicated "appearance" but a matter of tactile sensation traceable backward in the process from jumpers to material samples and, ultimately, to yarns. In this way, "formal simplicity" is made open for reinterpretation. When working with material

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prototypes, the aesthetic appreciation of a reduced complexity can also be based on tactile sensation of materiality (and not just visual perception of form), which in Ravnløkke's case is related to yarns, knitting, patterns, and fit. The category of "functional realism," too, can be made open to the sensation of the material-tactile sensation of the design. The design is being "honest" in function because it is the result of a process working with users, enabling and empowering them to participate and integrating their input in the making process—hence, the stated ambition of making emotionally durable design. This kind of aesthetic appreciation of the honesty of the design depends, however, on the knowledge of individual users who are part of the project; the honesty of the design is, as such, not something to be overtly communicated by the sheer appearance of the individual jumpers.

In sum, Ravnløkke's project attests to how matters of material-tactile sensation can be made the basis of aesthetic appreciation and how working with prototypes can facilitate this process. Ravnløkke's project displays how form and function can be reevaluated in relation to tactile appearance and how, on building on this kind of sensual experience, a new kind of reflective and even critical engagement with the potential of the tactile features of the design can be encouraged. In addition, the aesthetic appreciation of this kind of design is not only dependent on tactile-sensual features but also on a contextual knowledge of its morally "good" qualities as being sustainable.[24]

Surface Effect

As discussed in chapter 4, aesthetic experiences of design are not only elicited by aspects of form or function but also by surface qualities of design objects. These are not just identified as outer appearance of form (which, obviously, also contributes to the surface of design) but as an ability of the design object to operate as a sign referring beyond itself.

As pointed out in chapter 4, this operation can take place either in the category of "semantic reference," where the surface refers to external meaning entities (e.g., when a chair resembles a plant), or with wider application, it relates to a "style" of a certain age (e.g., in signifying the 1950s). In the category of "ontological transformation," the surface enables the design object to enter new contexts, especially in media. In this context of aesthetic negotiations engaged though prototype work, I want to focus on the aspect of semantic reference as a concern of the design process, where design objects through their surface enter new meaning contexts.

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Constructing semantic reference The main case is a master project by industrial designer Bjørn Grummesgaard Hagensen, who graduated from the Design School Kolding in August 2020 and whose project I followed from initiation to fruition.[25] Being a part of an educational setting, Hagensen's project was not developed for a client but nevertheless intended to imitate real-life work as a designer; at the same time, this setting entails a subtraction of how prototypes are part of a design process, making his project relevant for my investigation.

In its overall frame, Hagensen's project investigates how "people relate to things and which things people like" (Hagensen 2020a). In this way, Hagensen explores core mechanisms of creating "symbolic" meaning in design, which always has two sides. On the one hand, symbolic meaning is about the meaning people invest in things (cf. Levy 1959); on the other hand, it is also a matter of how things can be designed to call for such an investment of meaning (cf. Folkmann 2016). Hagensen worked with the hypothesis that people especially invest meaning in things that have a history, a site-specific origin, and are related to feeling "home." His project investigates how this kind of symbolic meaning, which ultimately is individualized as the experience of singular places by singular persons, can be designed into products with wider appeal.

Choosing lighting design as a concrete focus, Hagensen defined his task to design lamps representing Esbjerg, Denmark's fifth-largest town with a major fishing and cargo industry, and Fanø, a small island west of Esbjerg in the Wadden Sea with a unique nature. Both sites are located at the windy west coast of Denmark, and Fanø has a ferry service from Esbjerg. On this ground, Hagensen investigated the means of design to refer to these sites. The idea was to let expressions of the sites be generated by people living there and, subsequently, to design lamps based on their interpretation of and emotional attachment to the sites. Like Ravnløkke, then, Hagensen has worked with the method of codesign, integrating user input in the design process.[26] In total, seven users participated. As the result, prototypes of two lamps were produced, the Esbjerg lamp (figure 5.12) and the Fanø lamp (figure 5.13).

In the development process, different kinds of user input were incorporated and transformed into prototypes. Users were asked about their impression of the two sites and their experience of their "texture quality" (how does the site look, what does it feel like), and they were also asked about preferences of types of lamps, such as floor lamps or pendants. Regarding

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Figure 5.12
Prototype for "Esbjerg" lamp, 2020. Design and photo by Bjørn Grummesgaard Hagensen.

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Figure 5.13
Prototype for "Fanø" lamp, 2020. Design and photo by Bjørn Grummesgaard Hagensen.

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types of lamps, Hagensen conducted experiments with lighting quality in collaboration with the company CPH Lighting to ensure not only an expression of form and texture of the lamps but also their functionality.

What I focus on here is Hagensen's work interpreting and incorporating impressions and experiences of the two places (Esbjerg and Fanø) into prototypes of the lamps, mainly as surface qualities but also through the type of lamp and its form. In this process, the prototypes were explored as vehicles of symbolic meaning and, succeeding from this, as vehicles of aesthetic appreciation based on their ability to establish a connection between object and the two sites through sign reference.

In a workshop format, users were asked to produce and relate to utterances about and images of Esbjerg and Fanø, thus producing a space of cultural connotations about the two sites. Esbjerg was related to meanings such as industrial culture, harbor, closeness to nature and the sea, being a relatively young town,[27] being home, and being part of childhood memories. In contrast, Fanø was attached to connotations of rugged nature, the Wild West of Denmark, delicacy, contrasts, cultural history of small communities, and, related to this, conflicts. As a part of the process, Hagensen asked participants about textures and materials associated with the two sites. In this way, broadly speaking, Esbjerg was associated with rust, urbanity, and seawater close to sandy beaches, whereas Fanø was associated with wild vegetation and house walls and individually colored doors characteristic of the villages on the island. Integrating this input into several prototypes reflecting individual users' preferences, also in relation to the type of lamp, Hagensen ultimately selected two prototypes to be further developed.

The two prototypes, made of wood for the base and the flexible and durable material Cibatool, an epoxy-based resin apt for prototyping, for the shades, employ in form and texture semantic references to the two locations. In the Esbjerg lamp, Hagensen attempted to incorporate references to rust in the orange shade and to industrial pipes and wires in the visibility of the wire intersecting the shade, as if it were sewn through it. The simple cylindrical base of the lamp contains a reference to the silos of the harbor. In contrast, the base of the Fanø lamp serves a functional purpose, also referring to the specificity of its locality. Its slimness ensures that it fits into the narrow window frame of traditional fisherman houses on the island, where the position and operation (lit or not lit) of lamps traditionally signaled whether the man in the house was at home.[28] According to the

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participant Marie-Louise, lamps in window frames are still used today to indicate whether the habitant of the house is at home or not, thus signaling the index of trust that forms is part of the community (Hagensen 2020b). The shade hangs flexibly on the top of the base, mimicking a weather vane, hereby indexing the windiness of the area. The user of the lamp may not only decode the referent of this sign (the lamp refers to wind) but also reflectively acknowledge the sign quality itself as an aspect of the lamp (the lamp is a sign)[29] and, on this basis, aesthetically appreciate the lamp for its ability to facilitate an act of semantic referencing. In addition, the potential of the lamp to elicit an aesthetic appreciation based on the ability of form and surface to contain sign reference allows more users to project symbolic meaning into it.

Furthermore, the specific modality of the sign specifies the kind of semantic reference that may affect the aesthetic experience of the operation of the sign. In terms of Peircean semiotics in relation to the analysis of material objects, the sign may refer in three central ways to the meaning beyond the object: as icon, index, or symbol (Knappett 2005).[30] The icon operates by direct resemblance, where something looks or feels like something else—for instance, when rusty colors imitate rust. I already used the word "index" above; it is a modality of the sign employing a reference by means of contiguity, causality, or a spatial-temporal relation—for instance, when rusty colors refer to industrial harbors or a weather vane to the wind.[31] Symbols are pure conventional signs in the sense that they have no internal motivation for their reference; to exemplify, flags signify by pure convention.

In the case of Hagensen's prototypes, they foremost employ indexical signs, inferring contiguity or causality. The orange color of the shade of the Esbjerg lamp is, however, intended to be an iconic sign of rust, but even if the color of rust requires some cultural knowledge to decode, the orange color requires translation to be recognized as rust.[32] The point is that the easiness of decoding is a tool for the designer to work with between the recognizable and the enigmatic. Hagensen's prototypes remain open for interpretation, which may entail a high aesthetic appreciation of their values as signs. In fact, a mixture of recognition and enigma may be preferable to obtain a high aesthetic appreciation of the object as an *interesting* sign not too easily and directly decoded. Hagensen's prototypes exemplify this balance. They are not designed as kitschy souvenirs with direct imitation (such as an Eiffel Tower figure designating Paris), and they do not confirm

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a specific idiom of a company or a country (e.g., "Danish design"); rather, they employ abstracted iconic and indexical signs that may require some effort to decode.

Next, Hagensen's work with prototypes is relatable to the different dimensions of aesthetics in design. First, the *sensual* dimension is present in the basic sense that his prototypes make ideas tangible by choice of form and material. Hagensen has not set function aside but has, nevertheless, started the process of "choosing forms because people may experience an emotional attachment to the objects through their forms" (Hagensen 2020b). Thus, Hagensen unfolds the quintessential function of prototypes to test by tangible means how new objects may be sensuously experienced as part of an actual setting in time and space.

Second, the *conceptual* dimension of aesthetics as well as the *contextual* dimension are in play as an invitation to viewers to reflect on the relationship of the objects and the places they originate from. In Hagensen's words (2020a), this aspect can be seen in the ability of the objects to "start a debate or encourage imagination" and thus initiate a reflection of how the objects refer to the places and how their references entail meanings for the people experiencing them. In this instance, the conceptual dimension is interconnected with the contextual dimension to a degree, where the former depends on the latter. That is, the conceptual reflection gains its meaning from the contextual factor of what is made present for "sensory experience" (cf. Rancière 2004; chapter 3) through the process of semantic reference—in this case, how Esbjerg or Fanø are made present in the lamps by various representative means.

Hagensen's work exemplifies how prototypes can be employed as a means for negotiating how cultural connotations can be built into objects and how this aspect of design can subsequently facilitate an aesthetic appreciation of the ability of the objects to contain such connotations. I have chosen to focus on the two prototypes that were fully developed, but obviously, more proposals and hence cultural connotations were in play in the process—for instance, a lamp with an industrial look of a professional stage lamp signifying the urban culture of Esbjerg. In this way, every process of working with prototypes necessitates choices, omissions, and a continuous synthetization. In the final prototypes, the site-specific references were intended to be recognizable while still being abstract and enigmatic. Optimally, the lamps should therefore encourage an aesthetic appreciation

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for their ability to operate as *complex* signs: for instance, the Fanø lamp in its ability to be an abstract indexical sign for windiness.

Play with readability The work with the surface effect of semantic references is also in play in the prototypes by Cecilie Manz (and Louise Ravnløkke and, probably, in prototype work as such). On this point, different working circumstances define different conditions and constraints and, hence, positions in the field of design. As an expert designer, Manz is experienced in working commercially in the market with clients, whereas Hagensen is a designer in the making, a novice designer, working in the simulated setting of a graduation project.

While Hagensen explores how cultural connotations of specific places can be built into design objects and hereby operate as surface effects, a common strategy in Manz's designs is to employ references to the object type, the company she is working for, or the design idiom of minimalist Danish design. The work on P6 is a paradigmatic example. The aluminum grid (figure 5.8) is designed to refer to the use of aluminum as part of B&O's historical legacy as a company dating back to the 1920s, and the leather strap (cf. figure 5.5) is a feature of historical portable music devices such as Braun's minimalist radio/phonograph TP1, designed in 1969 by Dieter Rams (see also chapter 6). On their surfaces, then, Manz's portable loudspeakers contain signs of imitation; that is, iconic signs that nevertheless require cultural knowledge to decode. On these grounds, the sign operates more like the *symbol*, building on tradition and convention and pointing back in history. The P6 is to be aesthetically appreciated on a sensual basis just for the work with materials, textures, and the varied rhythm of these elements in surfaces, joints, and fillets, but it may also be appreciated for its semantic reference to the history of its product type and historical styles, which hereby are being reinterpreted and recontextualized. This kind of aesthetic appreciation, which generally applies to contemporary products containing historical references, often requires *connoisseurship* as a particular cultural knowledge not shared by everyone.

Again, objects may not only be aesthetically appreciated for their immediately detectable sensual qualities but also for their conceptual play with semantic references through signs communicating in a mixture of immediate readability and difficult decoding. Thus, there are generalizable insights from the work of all the designers investigated here. First, semantic reference is not just a matter of a sign reference to something by various modes

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of the sign (e.g., iconic, indexical, or symbolic signs) but also a *play with readability* in a span between the decodable-recognizable and the enigmatic-intriguing. Second, that aesthetic appreciation may be elicited by this play.

Artistic Experimentation

In essence, prototypes are means of experimentation. As part of an ongoing design process, this aspect of design is not necessarily present or visible in the final product but left behind when the product is being finalized. But, as discussed in chapter 4, design objects may be aesthetically appreciated as a means of "artistic experimentation" in their ability to explore the new and unforeseen. In this stance, design is seen as resulting from an artistic-creative process. The paradox is that the design is being aesthetically appreciated for something that is not visible in the object but requires *knowledge* (e.g., of a historical process, as in the case of the WG24 "Wagenfeld lamp"; cf. chapter 4) or even may be *constructed* by means of marketing, hereby showcasing what has happened behind the scene of the design process. As pointed out by Manz (2020), who herself displays sketches and prototypes on her studio website, a critical awareness is required: "In the design world, it has become a trend and a language to show off your sketches; nevertheless, you are always able to see what is real and what is fake. At best, the process is being documented."

When focusing on finalized objects, the analytical question is whether or how the element of experimentation is visible or present in the object and how particular knowledge is obtained about it. When focusing on prototypes (the focal point here), the question is, instead, how means of experimentation are integrated in the design process in a way that they play a role for the aesthetic appreciation of the object. What is at stake is the relationship of both experimentation as a means in the process and the object to be aesthetically appreciated: which role the process of experimentation plays for the object and how it is made present to be appreciated.

Experimentation through objects One model of integrating experimentation in prototypical objects can be seen in the critical design movement, where objects, according to leading proponents Dunne and Raby (2013), can be employed as vehicles for discussing design and overall societal questions of technology and ideology; in their view, objects are being designed to be "hypothetical, or more accurately, fictional products to explore possible technological futures" (14). In this approach, prototypical objects are props

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for imaginings of how things could be or what objects could do. Examples are robotic objects that may require emotional human engagement to function, such as Dunne and Raby's 2007 Technological Dream Series project or Thomas Thwaites's 2009 DIY Toaster, an experiment with how to make a simple object if you have to do everything by yourself, even finding the raw materials. Regardless of how finalized in form, expression, and materiality such objects may seem (the objects of Technological Dream Series are superbly executed even if they, obviously, do not work, while Thwaites's toaster has, modestly understated, an unfinished appearance), they prototype an experimental scenario of new possibilities and thereby operate as "a catalyst for collectively redefining our relationship to reality" (Dunne and Raby 2013, 2).

In envisioning the new and criticizing existing reality, critical design objects employ artlike strategies. Dunne and Raby are, however, cautious about positioning their methods within the field of design:

> Critical design might borrow heavily from art's methods and approaches but that is it. We expect art to be shocking and extreme. Critical design needs to be closer to the everyday; that's where its power to disturb lies. A critical design should be demanding, challenging, and if it is going to raise awareness, do so for issues that are not already well known. . . . If it is labeled as art it is easier to deal with but if it remains design, it is more disturbing; it suggests that the everyday life as we know it could be different, that things could change. (Dunne and Raby 2013, 43)

Even if Dunne and Raby rest on a quite narrow concept of art ("shocking and extreme") and neglect art employing "relational aesthetics" (cf. Bourriaud 2001) by having impact on social contexts, their point is to stress the connection between experimental prototypes and everyday life. But even if they distance themselves from the neighboring field of art and position their work as "design," they tend to the "autonomous principle" of the field of design. This tendency is supported by the fact that Dunne and Raby mostly display their work in galleries (an art institution per se) or in publications.

Of course, the specific execution of the prototypes in question would entail an aesthetic appreciation based on, for example, sensual qualities of form and material. But, foremost, critical design integrates experimentation in prototypes by letting the prototypes be vehicles for a *conceptual* reflection of how things could be different. This reflection is carried out

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by sensual appearances; what is important is *that* it is being sensually conveyed (not how or in which specific way) and whether it elicits reflection.

Experimentation in objects A different model of integrating experimentation in the design process and, consecutively, in the object can be found in my last case, the master project of Johanne Katrine Knudsen Ib. Like Hagensen, she graduated from the Design School Kolding in August 2020, and I have followed her project, too, from start to finalization.[33] What is interesting about her project in this context is that Ib created a setting driven by open experiments where, for instance, several of the prototypes were created by participants without direct intervention of the designer. Hereby, the prototypes were not just the results of a process of experimentation but were themselves experiments, with the constitution of what a "professional" prototype is and what defines a design process. All along the process, Ib collaborated with Kunsthøjskolen i Holbæk, a liberal art school in Denmark. This collaboration indicates how she positions her work at the intersection between art and design and how this position frames her habitus as an experimental designer. At the same time, her ambition is not just to stay within the "autonomous" part of the design field but to work at applying her work to real-life contexts in, for instance, institutions.

In brief, Ib's project investigates how design can be used to create and facilitate "meaningful food experiences." Creating a Food Design Lab, Ib wanted to investigate possible future scenarios by setting up design experiments with participants, using participatory design methods and tools from performance theory with a focus on enactment of the scenarios. Building on several concepts with direct affiliation with aesthetic theory, Ib (2020b) set out to explore the "role and premises of senses" and "intensified experiences" in connection with the cultural and, especially, social meaning of eating. On this basis, the aim of her project was to design tools for setting the stage for more meaningful food experiences in social contexts. The result was "a recipe for eating together," a design concept for framing and debating eating experiences through the key notions of "senses," "care," "time," and "presence," which were made present for participants on a tablecloth framing the rituals of the meal (figure 5.14). As part of the concept, a series of tools were developed either for eating or for sensing the experience of eating. In the first instance, "the long spoon" (figure 5.15) is used not to feed yourself but when you have to be fed by someone else, or vice versa.

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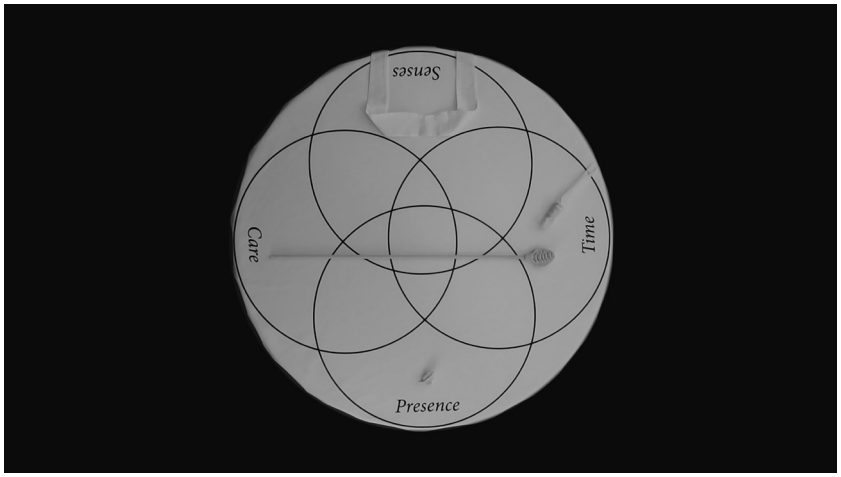

Figure 5.14
Design concept for "Meaningful Eating Experiences," 2020. Design by Johanne Katrine Knudsen Ib.

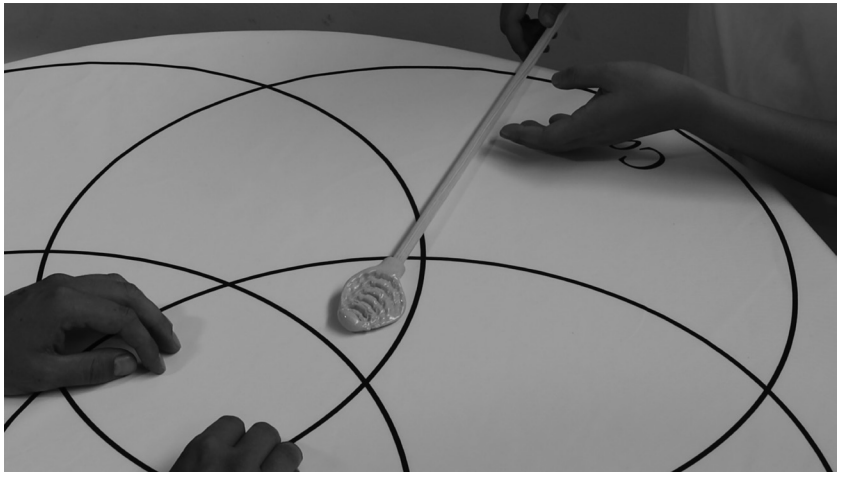

Figure 5.15
Design of "long spoon," 2020. Design concept by Johanne Katrine Knudsen Ib.

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Examples of tools for sensing the process of eating include a blindfold or "the hand" (figure 5.16), a device to put on one's hand to defamiliarize and thus freshen the bodily interaction with the food.

As experimental props for new ways of eating and interacting socially while eating, Ib's tools can be aesthetically appreciated for their ability to reflect and envision something new and unforeseen. In accordance with critical design, her design aims sensually as well as conceptually to push the boundaries of experience and project new social and cultural practices. But in addition to using the prototypes as vehicles for negotiating the aesthetic concerns of how design experimentally can explore new experiences and social interactions, the prototypes themselves serve as objects for artistic experimentation and, ultimately, are created experimentally. I want to focus on this last aspect because it provides new perspectives on prototypes negotiating aesthetic concerns.

Using the ductile material of ceramics in a January 2020 workshop "Food+Clay," which I have selected for this analysis, Ib engaged students at the art school to co-create prototypes for new eating experiences.[34] As a first step, participants sketched visual representations of consistencies of food while being blindfolded. The purpose was to strengthen the gustatory sense and enable new understandings of the sensual experience of eating. On this

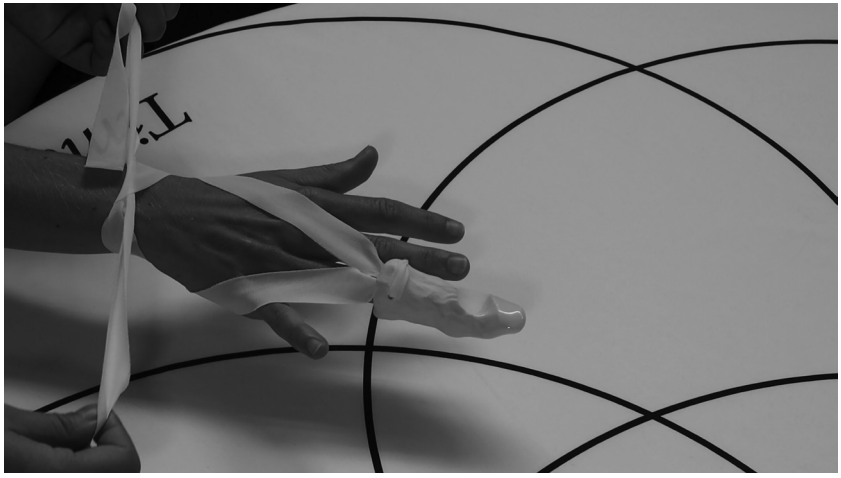

Figure 5.16
Design of "the hand," 2020. Design concept by Johanne Katrine Knudsen Ib.

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basis, the participants were asked to translate their visualized impressions in rough ceramic models of devices for representing and eating food. Prototypes within categories such as new containers for food or "long spoons" (figure 5.17) were developed. Subsequently, the prototypes were tested in a performance-like, minimalist setting with participants in white clothes and their faces partly painted white so that everyone was defamiliarized from the ordinary and thus mentally attuned to intensified sensual experiences as part of the special situation of exploring new ways of eating. The insight from the workshop on specific tools and practices of eating contributed to the subsequent process, eventually leading to the design concept bringing aspects of "senses," "care," "time," and "presence" together within the context of eating.

In developing prototypes in this way, Ib destabilizes and reinterprets the agency of the professional designer. Traditionally, the designer operates as the authoritative originator of the prototypes, as could be seen in Manz's, Ravnløkke's, and Hagensen's approaches to working with prototypes. Users may be consulted as part of a codesign process, but the designer remains the authority in matters of designing and giving form. Almost as if confirming the proposal of actor-network theory that agency may be distributed to many different actors, including nonhuman actors (cf. Callon 1999; Latour 2005), Ib distributed agency to nonprofessional participants as well as to the malleable material of ceramics. In close affiliation with the notion of vital materiality in new materialism (Bennett 2010), Ib (2020a) considers the agency of the ceramic material as something actualized by working with it: "The idea was to see what the material gives, to let it talk, to think by making."[35] As a designer, though, she maintains a central agency as the facilitator of the process. She acts as what Callon (1999) in the network of actors calls a "spokesman," who in a process of "translation" negotiates and delimits "the identity of actors, the possibility of interaction, and the margins of manoeuvre" (68), who, thus, in a process of "displacements and transformations" (81), defines the relationship of the actors and ultimately talks on behalf of them, something which, obviously, also is an act of power and control.[36] In a traditional sense, then, Ib does not give form to her experimental prototypes, normally a core competence of designers, but she defines the project and invites participants as well as the material to co-create, whereby she also redefines the concept of "codesign," which normally just includes the input of other human actors.[37]

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Figure 5.17
Prototypes of the heads of the "long spoon." 2020. Design concept by Johanne Katrine Knudsen Ib.

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In this programming of the design process, the prototypes retain their marks of being results of experimentation throughout the whole process. An aesthetic judgment based on Ib's design as the result of an artistic experimentation is not solely dependent on *knowledge* of the completed process of experimentation prior to and "left behind" by the finalized product (as in the case with the WG24 lamp). Instead, the artistic experiment as a prototype-like aspect of the design is integrated into the final project as part of its immediate appearance and hereby is made directly open for aesthetic evaluation. Naturally, Ib's project exists in a special part of the design field: design education, where a large degree of artistic experimentation is permitted and where the design process may disregard any commercial concerns. Nevertheless, I would argue, her project and approach to (1) distributing agency not only to nonprofessionals but also to the material and (2) not eliminating the experimental aspect from the appearance of object but retaining traces of it may serve as inspiration for how to design for an aesthetic appreciation based on experimental qualities of objects.

Further, her case can be supported by examples of the artistically oriented end of the design field. In Dutch Droog Design, setting a norm for experimental design, especially in the 1990s, objects may bear marks of being experimental in conception or execution by eliciting experimental use. Thus, the experiment may be present as a play with materials, such as in Hella Jongerius's *Soft Vase* (figure 4.7) or in the way the user co-creates the object, such as in Marijn van der Poll's 1999 *Do Hit Chair*, which finds its form when the user applies a sledgehammer to transform the open structure of a metal cube into a chair. In "high design" (cf. Julier 2014), which is a part of the commercial end of the design field characterized by a visible profile and, often, a strong mediation of the designer, an experimental approach may either be visible in the product or be communicated along with it. This is the case with several of the designs of the French Bouroullec brothers: the Vegetal chair (figure 3.1), mimicking not just nature but also an artistic process of letting watercolor painting flow freely, or the room divider structure Algues (figure 3.3), whose starting point in experiments with forms is celebrated by Dunne and Raby (2013) as being affiliated with critical design.

Indeed, Ib's project calls for an aesthetic appreciation based on its *conceptual* qualities of being experimental, just like the examples of Droog Design, the design of the Bouroullec brothers, and critical design. But at the same time, she allows the conceptual dimension of the design to be mirrored or unfolded directly in the *sensual* dimension of her design: The tablecloth

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may be smoothly and quite simply designed, but in their unpolished sensual appearance, "the long spoon" and "the hand" clearly bear the mark of being the result of a process of experimentation. Seen in their immediate appearance, the tools are indexical signs of the process that they are the result of. They do not mask this fact, as many industrially manufactured products do.

Of course, such signs can be manipulated, as when industrial products are designed to appear as if they are handmade, which was the case with many products in the wake of pervasive industrialization at the beginning of the twentieth century. In the case of Ib's project, the maintenance of the indexical signs of the process of experimentation signifies the continuance of the experimental setting from the initial point of the project to its result in the proposed design concept. This experimental setting is thus intended to be prolonged contextually in the cultural practice of eating. The concepts on the cloth should help us reflect on aspects of eating, and importantly, the tools should defamiliarize habits and enhance the perception, much in the same way as Viktor Shklovsky (1993) propagated this to be a central capacity of art (cf. chapter 3).

Aesthetic Concerns Negotiated

In the above analyses of the works of selected designers, I have attempted to demonstrate how qualities of design objects, which are to be aesthetically appreciated through various aesthetic categories (cf. chapter 4), may be reflected in the work of designers. My selected examples are, again, biased within a context of Danish design with a tendency toward the artistic and experimental, but I nevertheless claim my point with general application for the work of designers.

When taking as a starting point the categories framing aesthetic appreciation of objects in relation to *form*, *function* (and the relationship of form and function), *sign qualities* pointing to contexts outside the object, or the relationship of the object and its *experimental* process of becoming an object, the argument of my analyses is that the ways these aspects contribute to aesthetic appreciation can be traced back in the design process. Thus, designers may reverse my tracing back of aesthetic concerns in the design process and with figure 5.3 as a starting point ask themselves, from the point of view of designing where the design is not-yet-existing, how aspects of form (including the sensual appearance), function, sign qualities, and the reflection of the design process in the object may appeal for aesthetic appreciation.

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To delimit and sharpen my analysis, I have focused on the *prototype* as a vehicle for the kind of negotiation of aesthetic concerns that continuously takes place in all phases of the design process. Even if I have selected artistic and experimental projects for the purpose of illustration, *all* design objects are submitted to concerns of form, function, sign qualities, and design process. Consequently, I would argue that they are subjected to considerations of how these concerns are being integrated in the object to be part of how the object communicates and elicits appreciation.

With regard to form, function, signs, and process, the aesthetic dimensions of the sensual, the conceptual, and the contextual are negotiated in various ways.

Form is closely related to the sensual dimension of aesthetics together with other sensually appealing aspects such as material, texture, and color. As a signum of what the object is about, *function* is often connected to the conceptual dimension of design. In working with the *relationship of form and function* during a design process, the aesthetic coding of the object is being negotiated to determine what the idea of the object is and how it is being sensually conveyed. Thus, aesthetic coding is always a part of design objects and worked with as part of the design process.

Next, design objects with a high degree of surface effect through *sign reference* may entail a conceptual reflection related to the sign reference, which, in turn, relates to a specific contextual space of meaning. Again, the conceptual dimension of the design only coexists with its sensual manifestation: The sign reference may point beyond the object to some external meaning (in the case of Hagensen, the localities of the town Esbjerg and the isle of Fanø), but the sign is only being actualized in its sensual manifestation in the form, material, texture, and color of the object. In the work with prototypes, the integration of sign qualities in the sensual means of the design may be put to the test and tried out. Hereby, the tightness or looseness of fit between conceptual sign and sensual appearance are at stake.

Last, the presence (or a knowledge) of artistic *experimentation* as part of the creation of the object may entail a conceptual reflection of the relationship between origin and product, artistic creation and finalized solution. As suggested, an aesthetic appreciation based on this aspect may be generalized to consider how objects also in nonartistic contexts incorporate or reflect the preceding design process.

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6 The Post-Material Aesthetics of Digital Objects

Since the industrial revolution, design has been closely affiliated with developments in technology. Whereas art has been an important source of influence for design regarding matters of form, decoration, and exploration of expression, technology has played a central role for the manufacture of objects, designing and obtaining new functions, and making objects work. A well-designed toaster, to take one example, does not just become a great product because of its smooth or interesting form, even though this quality contributes to its appeal, but also because of materials, mechanics, and electronics.[1] As a vehicle for transmitting and translating complex technology and making it accessible to users, design may, with the words of the design theorist Richard Buchanan (1992, 19), appear to be a "liberal art of technological culture." In exercising a "technological imagination," media theorist Anne Balsamo (2011, 6) states that design can evoke people to "engage the materiality of the world, creating conditions for world-making."

In this chapter, I will investigate the aesthetics of design objects, specifically in relation to *digital technology*, as this is one of the most, if not *the* most, important technological developments in the last 25 years. Digital technology has changed and is changing conditions in economics, culture, media, and design. In terms of processing data and information at a high speed, digital technology is omnipresent, and *digitization* designates the ongoing process of exchanging information in networks enabled by digital technology and, accordingly, of relating objects and people in completely new ways (Stalder 2016; Thylstrup 2019).

Consumer electronics in the form of smartphones (and, before that, iPods and MP3 players) tablet computers, and activity trackers shaped as rings or watches have flooded the market, and still more products are designed with embedded digital technology in order to obtain higher functionality in

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operation in everything from refrigerators to cars.[2] By employing technologies such as radio-frequency identification (RFID) chips and Wi-Fi options, objects may be connected to the Internet or to other objects in an Internet of Things (IoT), a development accelerated in the last 15 years by the introduction of mobile devices operating through mobile broadband.

Approach

More specifically, I want to investigate what it means for the aesthetics of design objects to incorporate digital technology and partake in the processing of digitized information. I build on the framework introduced in chapter 3, which may facilitate analysis of all kinds of design objects, but in this chapter add the complexity of digitization, as it changes the sensual and conceptual qualities of the objects.

A part of this investigation is an examination of the constitution or being as digital objects—that is, their ontology. A central axis of investigation will be the relationship between the physical materiality of objects and the invisibility of digitized information. The question of digital versus material has also been dealt with within fields such as human-computer interaction (HCI), digital art, and new aesthetics. Usually the question is, What happens when digital technology turns material or is being treated as a material? My starting point, however, is to question what happens when the material turns digital. Material objects are not only gateways to the wonders of digital technology—in the way a smartphone, through its interface, incorporates multiple media and functions and conveys information such as music, film, or Internet content—but the digital also *does something* to the materiality of objects, as it enables objects to relate to wider networks of information and interaction.

In one of the few ambitious approaches to understanding and conceptualizing how digital technology is changing the materiality of things and how a "reconfiguration of relations between people and things" is taking place, design researchers Johan Redström and Heather Wiltse (2019) have proposed that we see these objects as "*fluid assemblages*" in being "networked, dynamic, and contextually configured" (1–2, their italics). In their view, which I share, recent technological developments and the affiliated economic ideas of capitalizing information present the same kind of "drastic" shift in production modes, the nature of the objects, and ways

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to engage with them as the industrial revolution did in the shift from the handmade to industrial production.

In my approach, I will stress the role of material objects and employ the term *digital object* to designate designed objects incorporating and employing digital technology. But I will also stress the new character of these objects and propose a concept of *post-material aesthetics* that acknowledges the material grounding of objects but also evokes a reflection beyond the material as these objects gain their importance from the informational networks and structures that they are part of. As Redström and Wiltse (2019) observe, these objects change character when being disconnected from the network and do not then function in the same way.

In the following, then, I will investigate the impact of digital technology on the ontology and aesthetics of digital objects. As a start, I will present the main case of the chapter, a portable loudspeaker and the system around it, especially the smartphone, and relate it to its contextual framing of digital technology. With this as a background, I will enter the concept of the post-material aesthetics in a discussion of how digital objects relate to materiality, function/interaction, and conceptual values.

The Cultural Circuit of Digital Objects

In 2017, the Danish hi-fi manufacturer Bang & Olufsen (B&O) launched the portable loudspeaker *Beolit 17* designed by the Danish designer Cecilie Manz (figure 6.1). While its 2012 predecessor, the *Beolit 12*, used Apple Airplay technology to connect to Apple products, the Beolit 17 also connects to devices employing Android operating systems through Bluetooth technology. As a product range, the Beolit name relates to a history of transistor radios dating back to the (not portable) *Beolit 39* (from 1939) and the compact *Beolit 400* (from 1970), among others. However, with the new Beolit series from 2012, introduced as part of the sub-brand B&O Play aimed at young consumers who prioritize mobility, the product was now a loudspeaker without any additional built-in features, such as FM radio or DAB (digital audio broadcasting). Instead, the product was designed to connect wirelessly to and draw information from external sources, especially smartphones.

On this point, I want to draw attention especially to the smartphone as a material object conditioning the operation of the Beolit 17 (and other objects of its kind) and for understanding the post-material aesthetics of

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Figure 6.1
Beolit 17. Loudspeaker manufactured by B&O Play, 2017. Design: Cecilie Manz. Photo credit: Bang & Olufsen.

digital objects. As a material object transgressing its own material boundaries in connecting to other objects and the Internet, the smartphone has increasingly become an object for analytical interest—for instance, as a "transmedium" amalgamating different media and creating new conditions for human perception (Ruf 2018b). The smartphone is, generally speaking, a multifunctional device incorporating many types of functions, including browsing the Internet and conveying and containing information such as music. By controlling other devices, it often forms the core of small IoT systems. In a very short time since the introduction of the first iPhone in 2007, the smartphone has become the primary material tool that many people use for engaging with possibilities enabled by digital technology; it is an object that people engage with in an intimate relationship, and it has changed conditions for interacting with and experiencing our surroundings.

Importantly, the Beolit 17 and the smartphone represent two different types of design employing digital technology. The smartphone began its existence as a "born digital object," while the loudspeaker is a "digitized object" that contains certain "characteristics of some physical object" that existed before digitization (Owen 2012), in this case an acoustic loudspeaker. Of course, the smartphone has a precursor in the cell phone, which paved the way for today's widespread presence of smartphones. But while the

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cell phone is a device dedicated primarily to making telephone calls and exchanging short text messages (SMS), the smartphone is closer to a computer in its ability to connect wirelessly to the Internet and to contain large amounts of information.

I will relate the Beolit 17 and the smartphone to three contextual factors in the cultural circuit of digital objects: the network of objects; the extension of the network to structures of production and consumption; and cultural implications of new modes of creating and exchanging meaning, establishing communities, and organizing knowledge.

Wirelessly Networked Objects

Seen as an isolated design object, the Beolit 17 may be approached as any other "analog" design object. It has sensually appealing features in its use and a combination of materials such as aluminum, leather, and plastic. At the same time, though, it is connected to and dependent on other objects, interfaces, and streams of information that, in total, form a larger system that enables the loudspeaker to work. It is operated through the interface of the smartphone (as mentioned, an earlier iteration, the Beolit 12, worked only with Apple's iPhones) and draws on either downloaded files or streamed data as the source of music.

That objects depend on larger systems to work, however, is nothing new. Within the context of product semantics, Klaus Krippendorff stated in 1989 that design objects function and gain meaning within the context of "cultural complexes" with "cooperative forms of interaction" among several objects, such as flashlights and batteries, or cars, as another example. It takes a complex of "car dealers, automobile manufacturers, streets, municipal transportation departments, gasoline stations, oil producers," to keep cars running (Krippendorff 1989, 36). Objects always form systems in a "syntagmatic" relation (e.g., CD–CD player–amplifier–loudspeaker), where each position can be "paradigmatically" replaced by a competing one (e.g, one brand of loudspeaker can be replaced by other brand).[3]

What is new is the role of digital technology and wireless connections for the establishment and operation of the system of objects. Today, many objects partake in an IoT where objects are connected to each other through the Internet or through a short-range wireless technology such as Bluetooth. Potentially, objects may not only be seamlessly connected in an IoT but, as "each technology feeds into the others," a "1 + 1 = 3 equation" may arise in

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a process where "networks and entire ecosystems of devices can alter data streams and create value" (Greengard 2015, 36–37).

On the one hand, the wirelessly networked objects may ensure a high degree (and stability) of function as they, conditioned by the use of the appropriate technology and standards for exchanging information, form a unity in operation. Many solutions within the context of the IoT aim to make things easier and smarter for consumers. Consider the refrigerator registering which groceries need to be shopped for, the automatic tracking and upload of results of a person's physical exercise, or the smooth operation of the Beolit by the smartphone.

But, on the other hand, the network of information may gain its own agency, when the amount and system of data exceed the otherwise limited system of objects. The network of information—for instance, the data about physical exercise uploaded to a website—will mostly be larger than the network of objects. Because of the structure of networks, the wirelessly networked objects can be seen to be open-ended in possible uses and applications, which is evaluated in a positive tone by Samuel Greengard (2015): "An individual device or thing connected to the Internet increases the power of that device . . . the ability to connect devices into a vast network—essentially the Internet of Things—increases the possibilities and capabilities exponentially" (83). But it may also mean, as suggested by Darren Wershler (2010), that things obtain their own discourse, possibly beyond human control, when they, as part of an IoT, become "garrulous" and "talk to each other constantly, in codes and machine languages, at incomprehensible speeds, outside the realms of the audible and the visible" (200).

The effect of "incomprehensible speeds" is that meanings and transactions may be difficult to read or understand. Whereas the systems of flashlights or cars (to follow Krippendorff's example) have appearance and structure to be grasped, systems operated by digital systems may now be difficult to overview. As an example, car brands offer that your car can be wirelessly connected to a call center that may track the car, unlock it if you have forgotten the keys, or gain information about the nearest burger bar.[4] In such a system, the car is not only a vehicle for transportation but part of a service system of security and travel experience that aims to operate smoothly, but without the consumer having access to data and information enabling the system and, possibly, being the subject of surveillance.

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The IoT may be the bright new future in functional design,[5] but in its system of exchanging information, it also means a renegotiation of the relationship of the material and informational, the mute and the talkative of objects, and the meanings and readability of what a "system" is in relation to design.

The inaccessibility of the operation of digital technology is, paradoxically, part of the enchantment and the fascination it evokes. An example can be seen in a 2012 commercial for the Beolit 12 playing on the theme of Little Red Riding Hood getting lost before eventually finding her way again (BeoStoreHungary 2012). In a desolate, urban industrial setting, the Little Red Riding Hood character is carrying the Beolit 12 as her basket of goodies and seems to feel stalked by sudden flashing, rectangular lights. Eventually, the lights surround her, but at the end of the one-minute, 18-second film, she is able to control the lights and make them go away by touching her iPhone, revealing that the flashing lights were iPhone screens. At the point of resolution, a female voice whispers, "Wireless sound system for your iPhone—by B&O Play." The commercial mixes aesthetic categories of the interesting and the uncanny, even if the feeling of suspense is resolved when Little Red Riding Hood makes the right connection between the Beolit 12 and its iPhone app. As a result, Beolit 12 gets the role as an object of resolution that integrates all the supposedly wireless streams of information indicated by the rectangular lights.

Changes in Production and Consumption

The material objects of the loudspeaker and the smartphone relate to a larger network of production and consumption. To look at design in terms of conditions in production and practices in consumption is nothing new. Within cultural studies in design, initially the attention was directed toward conditioning factors circumscribing the process of attributing meaning and value to design objects, such as factors of production and consumption (Walker 1989), and later supplemented with mediation in the question of how meaning is ascribed to design in media such as user manuals, magazines, and advertising (Lees-Maffei 2009) or in the "circuit of culture" of production, consumption, representation, identity, and regulation (du Gay et al. 2013). What is new, however, is how digital technology changes aspects of how this cultural circuit operates and how central aspects of digital technology

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condition how production and consumption relate to each other and set the frame for digital objects.

Platform economy In order to make the Beolit 17 work, a music source is required. How music is being distributed has changed massively in the last 20 years because of technological developments. In the 1990s, the CD defeated the vinyl record as the main medium for storing, distributing, and listening to music. Then, during the 2000s, as small devices were increasingly able to store and transmit large amounts of digital data, the CD turned out to be a transitory medium (Straw 2009) and was replaced by, first, MP3 files and, later, streaming services. Whereas consumers once bought music by buying a physical medium (vinyl records, cassette tapes, and CDs) containing the music, streaming services such as Spotify provide copyright-protected music content to consumers that is immaterialized from the media that otherwise have carried it. If the streaming service provides a download option, you pay for the file; otherwise, you pay for the data stream. The presence of music in the context of use has prevailed over owning the music by owning its medium (cf. Preisendörfer 2018).

Streaming services are part of "platform economy" or "data capitalism,"[6] creating a new market logic and new conditions for production and consumption. Being nurtured by the globalization of digital information streams, digital platforms have resulted from a neoliberal ideology of deregulated markets. If regulation of data and content takes place, it is company-led and not state-led. On these grounds, producers of content and consumers interact through the digital interfaces of streaming services such as Tidal, Soundcloud, or Apple Music or sales sites such as Amazon or Wish. In addition, digital platforms may take the form of a sort of matchmaking between two parties exchanging, for instance, places to stay (e.g., Airbnb) or transportation services (e.g., Uber). On these platforms, it can be argued, supply and demand meet each other in new ways and bypass the traditional focus on money and businesses (Mayer-Schönberger and Ramge 2017). In this kind of platform economy, dominant companies no longer produce their own content but mediate the content created by others and facilitate it with some degree of moderation of content, but within a highly deregulated, globalized structure. In this sense, central parts of the economy have moved from production to offering services.[7]

Through intelligent algorithms (which often operate without human interference and appear as artificial intelligence) and massive amounts of

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data, information on supply (what products do we have?) and demand (what is requested?) increases and becomes more accessible. Streaming services or sales platforms may make new suggestions based on a consumer's history of listening or purchases, and if searching for a new product, such as a kitchen pan, the platform may be more clever than the consumer in "considering more models and sifting more offerings than you could have done yourself" (Mayer-Schönberger and Ramge 2017, 12–13). In this, the main difference between conventional and data-rich markets is the "role of the present information and how participants on the market use this information in their decisions" (15) and further, we can add, how data is being harvested by platform companies as part of a "surveillance capitalism" (cf. Zuboff 2019), converting data to profit.

Objects for consumption In relation to how "data capitalism" conditions the whole system of music consumption in the attempt to meet the specific demands of consumers through streaming services, the material artifacts may seem like mere transitory vehicles for the stream of music. The music could easily have been played through other devices (and who cares if the smartphone is an Apple or a Samsung, and the loudspeaker carries the brand of B&O Play, Marshall, or Minirig?). Even so, the specific quality of music reproduction may not be that important in comparison to the "particular quality of an experience that does not depend primarily on the product, the artefact, but more on the subject and the context" (Engholm 2010, 152), which may depend on how streaming services meet the demand.

At the same time, companies behind the material artifacts often originate in a market structure predating data capitalism. As a manufacturer of radios, B&O dates back to 1920s, and Apple is a child of the boom in the computer industry in the 1970s, when computers evolved from room-sized entities controlled by terminals to the delimited material expression of the personal computer (see, e.g., Atkinson 2010). These companies tap into data capitalism, but they have not contributed to forming it in the same way that Spotify has done. Apple makes a special case, though, because all along it has produced software as well as its music platform iTunes which now has converted into streaming services such as Apple Music and Apple TV; the purpose of Apple's software, platform solutions, and streaming services has for a long time been intended to direct attention toward its material products. On this point, Apple recognized early on that material objects, software applications, and content platforms all form one system.

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Still, the material products need to be kept in focus as they function as entry and access points for consumers' engagement with the possibilities of digital technology. Through the objects, possibilities are actualized and become tangible and relevant for consumers. In this way, actor-network theory has stressed the importance of material objects as nonhuman actors with some kind or degree of agency within an ever-changeable network of social meaning (see, e.g., Latour 2005). Seen through this lens, data capitalism may set the scene and provide the structure of how objects relate to each other in a larger network of production and consumption, but material objects have the power to possess an agency of how the network operates in actual situations, when a consumer chooses to listen to music from her smartphone while staring out of the window in a bus.

Furthermore, digital technology and data capitalism have provided consumers with better opportunities to offer feedback on products and services. When shopping on media platforms, consumers may directly comment on products and indirectly provide information on buying behavior through previous purchase and search patterns. It is not a new phenomenon for consumers to provide feedback for manufacturers to profit from. Manufacturers in mass-marketed lifestyle products like Nike and Sony have, since the 1980s, worked with methods for obtaining feedback from consumers. Sony especially is known for using "feedback monitoring systems" (du Gay et al. 2013, 52), observing consumers interacting with the products. Actually, the Sony Walkman was not conceived as a product for individual listening but turned out to be developed and marketed as such after consumer feedback, which also led to a method of customization and "lifestyling" of the Walkman, resulting in several hundred different models in the period from 1979 to 2010.[8]

Because of digital technology, the interrelation between production and consumption has been intensified, changed in character, and increased in scale. Not only do digital platforms and digital media such as social networks offer reciprocity in communication where users also produce content, but the integration of user feedback is enabled and nurtured by the devices, whereby "market feedback loops" entailed by users are "being embodied in things" themselves (Redström and Wiltse 2019, 161). In the light of Shoshana Zuboff's (2019) concept of "surveillance capitalism," we can further say that the devices are designed to facilitate the harvesting of data. As a result, digital technology has not only changed the *form* of

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feedback (making it easier and quicker and employing reciprocity in media and platforms) but also its *effect*. Consumers may contribute to change the function of the material objects in question. The hardware of a smartphone may not be affected, but its operation certainly will.

Digital Culture

In many respects, digital objects evoke new cultural practices. Being networked with other objects in systems of information and relating to new modes of production and consumption, digital objects produce new material framings of experience and conditions for "ways of living," to employ one of Raymond Williams's (1976) famous definitions of "culture" (90).

In the case of the Beolit 17, it offers mobility combined with maximum accessibility to its music sources. When the loudspeaker connects to the smartphone, it can connect to streaming services on the Internet or, if the smartphone is offline, to a selection of downloaded music, which can be combined at random. In portable stereos of the 1980s, not operating wirelessly but with cassette tapes, the source was limited and linear. Further, digital objects may be vehicles for social interaction in new ways, as new spaces unfold where this interaction can take place. Of course, people can still go to the beach and flash their Beolit 17, or just read magazines, and see if they can detect other consumers with the same taste. People may even meet and form subcultures of Beolit 17 consumers (even if I do not think it is the case). But more importantly, digital media have offered new venues for posting text and images, linking, liking, connecting, and hashtagging. In the virtual space of digital media, brand communities that are transitory and intimate at the same time can arise as all users can see each other's (staged) profiles. In this way, digital media may affect how consumers engage with and relate to acts of consumption.

The implication of digital technology is so widespread and touches on so many areas of everyday practices and ways of living that the concept of *digital culture* has emerged to describe the change. In digital culture, information comes to being in networked infrastructures, data has taken new forms and massively increased in amount to become Big Data, new practices and rules of cultural representation and social connectivity have developed, and the structure of power has changed. On the one hand, more people may feel more empowered in being able to express everything all the time and to employ new technologies for ever new purposes. But on the other hand,

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still more power is being concentrated in the multinational corporations of data capitalism, which sets the scene and structures and hereby delimits, while surveilling, what can be expressed.

In a lucid analysis of the elements and implications of digital technology, Swiss media theorist Felix Stalder (2016) uses the term "digital culture" to investigate changes in the processes of creating and exchanging cultural meaning, establishing communities, and organizing knowledge.[9] As a foundation for the analysis, Stalder discusses the relationship of culture and digital technology and investigates the forms of this relationship. He points to an expansion of the "cultural field . . . which not only is shaped by uninfluenceable necessities, but on which ground competitive options exist or can arise" (58–59). He counts design and advertising as part of this cultural field. At the same time, this cultural field gets increasingly technological, with digital media enabling the possibilities of expression and the Internet being a means for producing and exchanging cultural meaning while being virtually accessible everywhere through mobile broadband. In this sense, Stalder concludes, digital technology moves from the periphery to the center of culture, and "digital culture has already become common and dominant" (94). The digital is no longer only a domain of technological invention but has a high cultural impact.

Stalder investigates three specific "cultural forms" of the digital: referentiality, communality, and algorithmity.[10] The combination of these three forms is important because they describe a framework of the ontology, structure, and circulation of meaning in the digital age, which lays a foundation for the concept of post-material aesthetics that I will describe in the next section.

By *referentiality*, Stalder proposes that meaning is created and circulated in new ways as a result of digital technology, especially digital media. Strategies of remixing, remaking, appropriating, sampling, citing, and creating mash-ups are the norm rather than the exception, and Stalder points out that information in digital media increasingly cannot be seen as "representations of an external world" but as a "self-reflective, closed world" of self-circulated information (Stalder 2016, 186). Meaning production in the age of digital technology is carried by a dynamic of transformative making, which is groundless, in principle endless, reciprocal in the shifting of citation and what is being cited, and intersubjective as part of a connected network of subjects. Stalder goes as far as claiming that digital media to a

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large degree "contributes to the organization of the material world" (116), as they contribute to structuring human perception and processes of meaning attribution—as when an object is praised in social media and then, subsequently, in the real world acknowledged for its qualities.

By *communality*, Stalder points out that digital media have led to new social constellations, such as grouping of consumers with the same interest. In the digital age, new social formations are informally organized, dependent on the performativity of selection and interpretation, enabled by the media, and unfold in new modes of time and space in a "placeless continuously present" (147), where everybody can be connected to everyone and only the present counts. In chapter 7, I deal with Instagram as a vehicle for this kind of communality.

Last, Stalder proposes the *principle of algorithms* to be a cultural form as algorithms discriminate, organize, and select data and often decide, for example in search engines, which information should appear for different users. As Stalder states: "The world is no longer being represented; it is being generated specifically for each user and subsequently presented" (189). Algorithms are one of the strong assets of data capitalism, as they are dynamic and adaptive; they are, at the same time, nontransparent, incomprehensible and posthuman in operation and effect. Often, their operation is so complex that their foundational principle cannot be detected. In other words, they operate on their own. The operation of algorithms is the fulfillment of the dictum that "software takes command" proposed by Lev Manovich (2013) and echoing Sigfried Giedion's classical 1948 book *Mechanization Takes Command* on industrial societies. Just as software today dominates as a technology in the creation, distribution, and interaction with artifacts and cultural meaning, so algorithms have gained in decisive power in what counts as relevant or meaningful.

Algorithms not only direct users toward information but gain data as well from their responses. This data about preferences and behavior is another dimension of data capitalism/surveillance capitalism and an asset for companies facilitating data, such as Facebook and Google, as they can target advertising or even sell the data to third parties. An example of its effect was the early 2018 scandal involving the consulting company Cambridge Analytica, which illegally used data from millions of Facebook users to target a political campaign for getting Donald Trump elected as president of the United States in 2015.

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These cultural forms of the digital directly apply to construction of the meaning and operation of this kind of material and digitally operated objects such as the Beolit 17. The aspect of referentiality touches on the referential ground of the loudspeaker when it is positioned in digital media and people ascribe meaning to it. What do we talk about—a real object, originating in a company, or a visual sign to be circulated in media? As a next step, communality deals with the question of how consumers organize around a product and may form a sort of brand community, such as can be found at Instagram by following the hashtag #beolit17 or at product review forums where, in this case, consumers have expressed being disappointed about low battery capacity (Amazon 2018). Finally, algorithms in the case of Beolit 17 also apply to affiliated media such as Instagram but exist furthermore in a network of related media and music sources, when users are provided with music suggestions in streaming services that, reversely, gain information about the users.

The Ontology of Digital Objects

Digital technology has changed the system of objects and formative factors of production and consumption and also created new cultural forms. The question is how these conditions have created a new ontological constitution of digital objects being material and digital at the same time and what the implication is for the aesthetics of these objects.[11]

In the most developed exploration of the ontology of digital design, the book *Changing Things: The Future of Objects in a Digital World* (Redström and Wiltse 2019), aesthetics only plays a minor role. The authors do not neglect aesthetics but criticize "current aesthetics" as being "attuned to seamless 'wholes,' or totalities" (146) of industrial objects and call for a "new aesthetics" as an "*aesthetics of immanence*" (162, their italics) to comprehend the networked, fluid assemblies of digital things. I do not disagree with the ambition of conceptualizing an aesthetics that can grasp the being and effects of digital objects, but the authors construct a simplified image of "current aesthetics" that disregards current trends in design aesthetics (and contains no references), whereby they do not acknowledge the potential of existing approaches in design aesthetics to cope with the phenomenon of digital objects.

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In the following, then, I will examine the ontology of digital objects and contest aesthetic concepts for doing so. What are the conditions for these objects to create aesthetic appeal, sensually and conceptually?[12] I will deal with this question in three steps and look at (a) the *materiality* of digital objects as a means to create sensory appeal, (b) the role of *function and interaction* as a dynamic means to create sensory appeal, and (c) the *conceptual* values, particularly in the reflection of the concept of "technology." These three elements are central constituents of what I term the *post-material aesthetics of digital objects*. The method is to conduct conceptual analysis of the ontology of digital design objects and hereby investigate the aesthetic potential of objects for framing human experience.

Materiality

No digital object is without materiality. The Beolit 17 is indeed a material object to be engaged with through its sensuous qualities, which are experienced visually as well as tactilely. In its sensual appearance, the Beolit 17 reflects a strong emphasis on look and texture; the work with materials and quality workmanship is evident in the detailing of the assembly and seamless fittings. With regard to materials, the designer has used plastic to keep the product lightweight, mobile, and affordable in combination with the more expensive aluminum material on the front, which is in accordance with the company's signature design idiom (cf. Kaufholz 2015; see also chapter 5).

In this sense, an object like Beolit 17 resembles traditional, nontechnological design objects in having a clear focus on outer appearance in form and material. At the same time, the Beolit 17 is designed as an object with a closed extension and a formal expression as an enigmatic block whose function may be hard to detect at first glance. Its tactile interface for operating the loudspeaker is reduced to a minimum, as the idea is to operate it from a smartphone.

In its inaccessibility as a closed object, the Beolit may connote the design of the "black box" design of the early age of technological artifacts, which soon became a metaphor for technologically operating objects. In function and operation, the black box could always perform, even if its function and operation could not be decoded based on appearance. An early version of this relationship between appearance and function can be seen in

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a consumer electronics object such as the seminal TV Black 201, designed by Marco Zanuso and Richard Sapper in 1969 for Brionvega, which in its off-position appears as an enigmatic black object and only reveals its function when it is switched on. Almost the same play with appearance may be seen in a simple consumer object such as the Cube Click Clock, a simple alarm clock that only reveals its function when touched and otherwise appears as a simple wood block (figure 6.2). In principle, however, the surface of digital objects may not entirely display the functions or exhaust their potentials. In general, we can speak of digital objects as being inherently limitless and potentially open-structured in their intension, which may, despite their material limitation qua material objects, provide access to new spaces of possibility in and through the objects (cf. Folkmann 2013). Thus, digital objects often have a dynamic and changeable character that may affect their external material appearance (as in the Cube Click Clock or in interfaces) or may not do so (if only the function changes but not the appearance of the design).

Material and Digital

Digital objects are always material, but they are often in operation and connection to other objects also *more* than just material. It is in this sense that I will point to these objects as *post*-material; in their material ontology, they are physical objects, but in their operation they often exceed their materiality.

Figure 6.2
Cube Click Clock, 2009. Design and photo credit: Gingko Electronics.

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As vehicles for streams of digitally conveyed information, they can be seen in context of the negotiation of the digital and material that has many manifestations today. A *blurring* of digital and material seems to be taking place, creating many new configurations of the digital and the material.[13] However, two formative movements can be detected: a movement from the digital to the material and, conversely, a movement from the material to the digital.

From digital to material In the first movement, the digital turns material. Whereas the starting point in research in digital technology often has been on-screen interfaces (e.g., in research in HCI and interaction design), the interest has gradually turned toward the question of the digital as material. In the last 15 years, "the computational" and "digital" has attracted attention as a material for designing (Vallgårda and Sokoler 2010; Wiberg et al. 2013), and the role of materials and material aesthetics for interaction design has been explored (Arnall 2014; Chen et al. 2015): Digital technology has obtained material representations beyond the screen. For example, Tangible Media Group at MIT Media Lab (USA) has explored interfaces as material "tangible interfaces" (cf. Ullmer and Ishii 2000; Ishii et al. 2012). And at the Muthesius Kunsthochschule in Kiel (Germany), the exploration of how techniques of digital design, such as 3D printing, let digital design become material has been conducted under the heading of "postdigital materiality." Through the concept of "new aesthetics," further attention has been focused on "the confluence and convergence of digital technologies in various materialities" (Paul and Levy 2015, 27). These and other, similar studies have thus explored the topic of "metainterfaces"—that is, how on-screen interfaces move increasingly from the computer into the cultural field as technological objects, cloud services, and data captions (cf. Andersen and Pold 2018).

Thus, by increasingly getting material and becoming a part of the material world, the digital changes its status as a technology of the virtual-invisible streams of information to demonstrate its actual physical presence in the world.

An epitomized example is the art/design installation *Wi-Fire* by the Danish designer Rune Bering, shown at the Chart Art Fair in Copenhagen in September 2018 (figure 6.3). The installation consisted of a series of interconnected screens displaying images of fire, responsive to the amount of Wi-Fi traffic surrounding the work. At the same time, the otherwise invisible algorithms

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Figure 6.3
Wi-Fire, 2018. Design by Rune Bering.

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working behind the screens become a visible and detectable representation by affecting the images and creating screaming noise. In addition, the installations appear as the opposite of the imagery of the digital and technological as light, efficient, and transparent. The connected screens are placed in plexiglass boxes that, at the same time, are filled with wires, transformers, Wi-Fi hot spots and computers. In this way, the installations appear dark, heavy and opaque, testifying to a high degree of present materiality in order to make the digital functionality work. In Wi-Fire, the dark side of digital materiality, the digital turned into an obtrusive material, is at play. The project hints at digital hardware eventually turning into a kind of waste which is nondegradable and difficult to reuse.

From material to digital In the other movement, the question is what happens with the material when digital technology is involved. In recent years, materiality as such has gained attention. Positions such as material culture (Miller 1987; Dant 1999; Attfield 2000; Bille and Sørensen 2019), actor-network theory (e.g., Callon 1999; Latour 2005), postphenomenology (e.g., Verbeek 2005), and new materialism (e.g., Bennett 2010) have stressed the power of objects, environments, and materials for the development of social forms, the conditioning of human behavior, and the access to technology. Accordingly, a "material turn" has been claimed (cf., e.g., Heibach and Rohde 2015), following the series of the many "turns" in the humanities and social sciences in the last 50 years, such as the linguistic and visual turns, directing the attention to certain modes of representation of meaning.

With direct reference to digital objects, Redström and Wiltse (2019) build on these positions in their interest in how "things mediate human experience and engagement with the world, and how experience and engagement are shaped by the character of things" (5). In addition, uses of material objects containing digital technology or conveying digital content have been investigated within an anthropological framework as part of the "digital materiality" of the world in understanding contemporary interactive experiences, activities, and environments (Pink, Ardèvol, and Lanzeni 2016). In this context, uses of digital environments such as virtual reality and on-screen representations have been investigated along with digital objects in relation to smart homes (Strengers 2016) and "mobile intimacies" in the use of mobile phones and smartphones (Horst 2016). Furthermore, the computer as an object has been investigated through the lens of design history as a "socially and culturally constructed artefact" in its historical context

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(Atkinson 2010, 17). From this perspective, it has been pointed out that "the electronic computer has no aesthetic precedent of its own" (49). By extension, this leaves open the question of the specific aesthetics of digital objects in general.

Digital Material Ontology

In these approaches, the importance of the materiality of objects has been rightly claimed as gateways to new possibilities or as a part of new cultural practices enabled by technology. What I have in focus, specifically, is how the ontology of material objects is affected by digital technology; that is, what digital technology means for the material character and extension of objects and how this affects their aesthetics.

In an important conceptualization of digital objects, the German design theorist Gert Selle (2014) discusses the ontology of digital objects by examining the way they are handled: how we meet and engage with these kinds of objects. He draws on Heidegger's concept of *Zeug*[14] as a description of entities "ready-at-hand" with a clearly defined purpose.[15] While Heidegger used *Zeug* to refer to a concrete and artifactual entity, something new has, according to Selle, happened with the advent of digital technology:

> With digitization, ungraspable and invisible functions of tools have evolved. Increasingly, non-artefactual *stuff* [Zeug] exists. . . . Whereby much new *stuff* is positioned as things, just as the smartphone is, even though it no longer is to be comprehended through the concept of things. Even more, this kind of things can be labelled half-things as they still can be grasped, but no longer can be *comprehended* in the richness of their optional functions. (Selle 2014, 42, his italics)

I will point to two consequences of this ambivalence of the thing. First, the relationship of form and function is at stake, as the "richness of . . . optional functions" always is more than can be detected at the surface of the objects. For Selle, a central difference between things and half-things lies in our ability to engage directly with the thing and to read its implicit purpose—that is, what the thing is about or what it is for. I will enter this discussion below in the section on "function and interaction."

Second, Selle's conception has implication for a theory of the material in digital objects, even though Selle does not discuss materiality as such. Building on Heidegger's concept of *Zeug*, Selle (2014) asks how the design object "places us in the present" (45); that is, how we meet the design, but also how it, in its agency, meets us and reaches out to us. In this respect, he points

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out that "every new technology changes the cultural spectrum of experience" (45), a thought that relates to a trait in his authorship about how design as a force of culture actively structures values, action, and behavior (e.g., Selle 2007, 2015). On this point, the materiality of digital objects is a central part of how we are positioned in the world by and in relation to the design object.

With this understanding, the smartphone is a kind of digital object that frames our experience by different means. First, the smartphone is something other and more than a material object, as Selle suggests. By employing wireless connectivity, it has capacity to exceed itself and be *trans*-material in operation. In connecting to the Internet, the smartphone functions as an access point for interacting with new possibilities. It is not limited by its physical presence and gains its importance through "what we do with it, or perhaps rather *through* it" (Redström and Wiltse 2019, 2, my italics). At the same time, it is capable of containing and storing more information than can be detected at its surface (e.g., photos, messages, and notes). I will refer to this inner dimension of the smartphone as *inner*-material. These two manifestations of materiality, the trans-material and the inner-material, may be interconnected when the content on the smartphone (e.g., photos) is wirelessly uploaded to server services ("the cloud").

Smartphone Material Ontology

In its operation, smartphones contain and facilitate highly personalized content and have, accordingly, developed into one of the most personal objects that many people carry with them.[16] In this vein, media researcher Jens Schröter (2018) has argued that the smartphone is less interesting as a delimited object than as a device that offers to "deliver a compact, material operationalization of a societal connectivity" (155). Schröter further argues that the "appearance of use value" in the smartphone has to do with its "media-oriented and communicative potential" to facilitate meaning processes and to connect to cultural values such as sexualized potency and high-tech capitalism (154–155). In general, the smartphone's ability to be a vehicle for facilitating meanings beyond the actual object itself has made it interesting as an object for analysis in media studies. Here, the smartphone is seen as a part of a "system of technical organization" of media, as a "transmedium" facilitating different media expressions, and through the prism of "media aesthetics," the smartphone contributes to the organization of human perception

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(Ruf 2018a, 20–23). To relate to Selle's reflection about design changing the cultural spectrum of experience, the smartphone contributes to framing human experience by opening new possibilities for obtaining information and being connected at all times. In this regard, the smartphone creates an experience of virtually endlessly expanding functionalities and possibilities.

At the same time, a smartphone is a material object to be handled. It is an object that combines, or configures, material fixation with temporal movement (cf. Röller 2018). Since the launch of the first iPhone in 2007, materials and screen sizes have varied, but basically, it is a type of object that has, so far, found its fundamental design form as a flat, rectangular cabinet with a large display extending almost to the edges. To a large degree, its design has been led by the technological development of touch screens and increasingly miniaturized high-performance chips. Roughly put, as a material object, a smartphone is the largest possible screen in the slimmest possible cabinet[17] with a size that is appropriate for handheld use and for fitting into a pocket or a small bag. By comparison, the cell phone has had broader variation, including models that are collapsible and have different configurations of buttons and so forth. Of course, differences exist between specific products in terms of material and detailing, just as collapsible smartphones have reached the market, and they may be personalized according to taste in the use of covers, which can be transparent, colorful, or have ears.

As an interactive object, the smartphone requires intimate engagement, either with a touch of the fingertips or using voice recognition. It has a sensory aesthetic of its own, related to the sheer, sometimes even fetishist, joy of touching, handling, and feeling its material and texture.[18] In a very short time, the smartphone has developed into being many people's primary material tool for engaging with possibilities enabled by technology and has, being an intimate object, changed conditions and possibilities for being in contact with and experiencing the surroundings.

The materiality of the object and its trans-material/inner-material functionalities condition each other; they are two sides of the same coin. Smartphones may be relevant to their users through their functionality as a medium. The "richness of their optional functions," to quote Selle, makes these objects attractive and open to attribution of meaning. At the same time, this functionality is concentrated in the material object and made relevant to consumers by being small, lightweight, portable, mobile, and pleasant to handle. In this way, the post-material aesthetic of digital objects balances

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between and combines material and trans-material/inner-material aspects of the objects.

Function and Interaction

Because of their technological content, digital objects are often multifunctional and highly interactive. They appear to be dynamic in responding or even changing when they are used or handled. Of course, not only digital objects are responsive. Many traditional mechanical utensils are responsive and dynamic in the sense that they only work when operated in an interaction that changes their appearance. However, the development and employment of digital technology in object design has led to new kinds of functional, responsive objects with a temporal structure as their function unfolds in use.

In this context, my focus is on objects "that include digital content and where technology plays a role in the interaction" (Engholm 2010, 142) and on the question of what this technologically enabled interaction means for the character of the objects. I investigate this aspect of the ontology of digital objects in two steps. First, I want to focus on the functional element of digital objects. In the light of the traditional discussion of form and function in design theory, I examine how function unfolds or is being represented in the form of digital objects. With this as an outset, second, I contest how function can be accessed through the objects and how they point to their interactive potentials.

Representation of Function

Part of the historical legacy of modernist design theory is an emphasis on function and a view of functionality as a defining quality of the design (see also chapter 4). In its historical outset, design is differentiated from art by being functional and purposeful, even if it can be argued that decoration has its specific purposes too (e.g., by bringing joy in everyday life). But ever since design became its own theoretical discourse in the late nineteenth and early twentieth centuries, a central part of this discourse of design has been to attach design to the functional and the purposeful and, further, to pose the question of how this is expressed in the design.

An important and highly influential formulation of this has been the credo "form follows function," which has been ascribed to the American

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architect Louis Sullivan in the late nineteenth century. As an alone-standing maxim, it suggests that form is something to emerge from function in a pure and logical consequence.[19] As a dictum, "form follows function" can be seen as a label for large parts of modernism in design, especially in Europe, from the German Werkbund and the design reformers affiliated with it in the 1910s over the Bauhaus in the 1920s and 1930s to the clear-cut and often minimalist aesthetics at the Hochschule für Gestaltung at Ulm (HfG Ulm), as exemplified in the work of Otl Aicher and Dieter Rams in his minimalist design line for Braun. Other approaches to form and function can be found in design history, notably notions of form as relatively independent of function, as in the use of form as a parameter of "styling" for selling products in American streamlined design, or the ideological proposal of "form follows fun" and "less is a bore" in the postmodernism era of the 1980s.

The point is here not to enter into a historical account of form and function but to focus on the analytical questions of how function influences and can be detected in the design and, further, which role function plays as a parameter in the form of digital objects. Digital objects are far removed from this modernist ideal of "functional realism" (cf. chapter 4) because their possible functionalities can never be exhausted by their outer form. Many digital objects are discreet objects of "formal simplicity" (cf. also chapter 4) in the sense that they display less than their full capability. Selle points this out, and similarly, Redström and Wiltse (2019) point out that the "physical presence" of these objects "not only does not exhaust" their capabilities but "does not even come close to revealing them" through their outer form (152–153). Many digital objects are even endowed with a high degree of self-agency. Without the users' knowledge, they may be constantly auto-updating and (not without ethical problems of surveillance) tracking their users. Put simply, they may operate outside human control and intervention and "change dynamically to configure their relations to particular humans" (154). Digital technology allows the objects to be active in a very concrete way.

On this basis, digital objects may be said to contain an arbitrary relationship between form and function. Their functions may be open-ended, expandable whenever new apps are installed, and exist halfway between the material properties of the object and the immaterial operations of the digital technology. The digital operation of microchips and the possibility of wireless connectivity do not necessarily lead to a certain form, even if

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conventional appearances of types of objects are quick to evolve, as exemplified by the smartphone. Sometimes, however, the flat cabinet of the smartphone is made too compact, so that functional problems arise, for instance with the antenna (in some Apple iPhone models) or the battery (causing explosions in some Samsung Galaxy 7 models). In principle, the function of digital objects does not dictate any specific form characteristics, unlike, for example, a vase, which must have a form that allows it to contain water in order to function as a vase. For example, USB hubs exist in a wide range of design variations, including a ceramic USB hub shaped and painted to resemble a *Nautilus* shell (figure 6.4). Plainly, there is no inherent connection between the purpose of a USB hub and the shape of a seashell. Consequently, the surface of such an object can be played with, often with humorous outcomes, which also may be considered tasteless.[20]

Conversely, the question may be raised whether any *motivated* connection between the function and form of a digital object may exist.[21] Do (some) digital objects contain functional properties that are related to or generate their form? In the case of the smartphone, the philosopher Alan Goldman (2018, 100) has suggested that its "outer design" may not be related

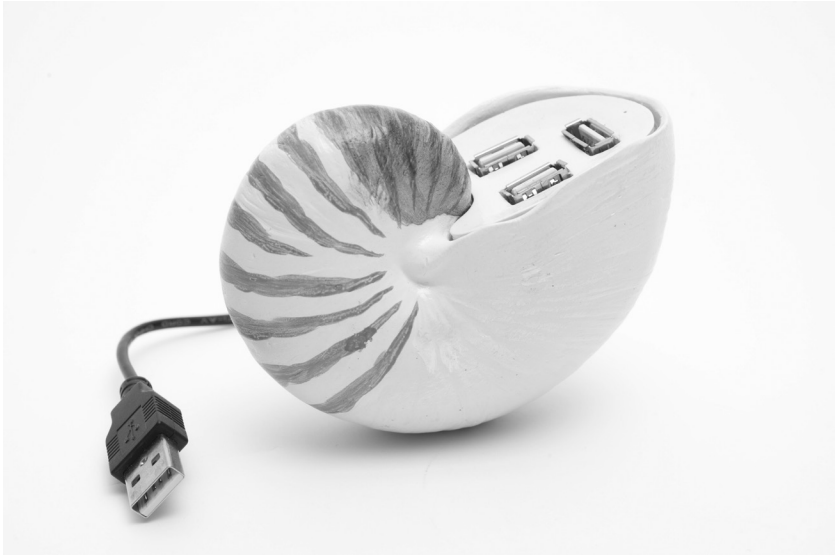

Figure 6.4
USB hub inserted in a seashell and then painted as a seashell (no year). Unknown manufacturer. Copyright: Armin Herrmann, Werkbundarchiv—Museum der Dinge.

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"directly to its main functions but involves properties that affect our ease of access to its main functions." He points out that "functional beauty" (cf. Parsons and Carlson 2008) may arise not only when "function is obvious in the form of the object" but also "when knowledge of the function of an object affects our judgment of its form in a positive way" (Goldman 2018, 97). *Knowledge* becomes a pivotal aspect, along with conventions of form, when the user's knowledge that a smartphone is multifunctional causes its "simple and streamlined design" to be perceived as being "remarkably efficient and powerful" (100). In this way, the "outer features are designed to maximally facilitate access to its functions," and the "more functions we know of, the more powerful and efficient the outer design of the material object looks" (100–101). In Goldman's analysis, the smartphone's large screen attracts attention and comes to signify the focus on ever-expanding possibilities and "open-ended functions of this small and flat device" which hereby gets to look "high-powered and efficacious" (100). What Goldman discusses, essentially, is aesthetic evaluation according to the category of "formal simplicity" as I have developed it in chapter 4. The smartphone is looking efficient because it has reduced complexity.

In terms of ontology, design objects always rest on insecure ground regarding the relationship of form and function. As pointed out by design theorist Annette Geiger (2012, 21), form can never causally follow from function as every "decision on form is fundamentally contingent" and unfolds within a certain space of creative and aesthetic possibilities. The modernist idea of "form follows function" builds on an assumption of causality with a nearly metaphysical character.

But in the case of digital objects, complexity increases when function is enabled by the operation of microchips and when the form, accordingly, in principle, may be designed with a high degree of arbitrariness, as in the case of the seashell USB hub. On the contrary, however, many consumer electronics products testify to (as discussed above) an astonishingly high degree of uniformity in design and have formed new, rather fixed product categories with established codes of convention; besides the smartphone, examples are laptop computers (cf. Atkinson 2010) or activity trackers formed as watches. When you see the clamshell form of laptop, you will immediately conclude it to be such an object and to function as a laptop. Of course, many objects are conditioned by mechanical features that influence their

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form. USB hubs need to have a port for the USB, and loudspeakers need to have a certain size in order to produce sound.

Interaction: Accessing Function

Consequently, the question of function in digital objects needs to be approached in a different way. With the technological component of the design, the function increases to be multifunctional and hyperfunctional, and the "form," as a designation of the outer appearance of the design, may have difficulties in reflecting this 1:1. Deriving from design's heritage in the arts, the concept of "form" may be criticized to be antiquated for describing modern design. Digital objects no longer have immediately communicating forms pointing to their function such as vases and chairs have. Thus, the question of the appearance of function in digital objects needs to be reframed. Instead of asking *how function is reflected in the form*, we may ask *how function can be read and accessed at the surface of the objects*, and further, how this opens a wider interactive potential of the objects. By leaving the question of form behind, the dynamic element of interaction gets clearer into sight.

Returning to the Beolit 17 music system, which connects with the smartphone, the two objects provide access to functions and enable and nurture interactions in different ways. The Beolit 17 contains five buttons, just as the related B&O model P6 (figure 5.5), while the smartphone is operated by a touch screen that provides access to the interface and the various apps, including the Beoplay App, which can be used to operate the Beolit 17. Thus, the two objects represent two different models for providing access to functions and enabling interaction.

On the one hand, Beolit 17 resembles traditional radio designs with buttons for the user to interact with. It is operated in much the same way as radios from the predigital era, including, for example, the Braun radios of the 1960s, whose minimalist and simple design anticipate the Beolit 17. In general, the design history of radios can be described through the attempt to reduce complexity in the interaction and create easy access to function. On the other hand, the smartphone employs on-screen interaction. The interaction through a digital interface on a screen relates directly to the rise of digital technology and computers since the 1970s and 1980s and is thus a newer phenomenon. Interaction through buttons offers different

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possibilities than interaction using an on-screen interface, as buttons offer a limited set of interactions (on/off, connect Bluetooth, and volume up/down in the case of the Beolit 17), while the touch-screen interaction is, in principle, limitless.

These two types of enabling function and interaction in digital objects can be circumscribed by and point to different disciplines in the field of design.

Product semantics With regard to physical properties of objects pointing to functional aspects, the discipline of *product semantics* has provided concepts for describing different kinds of signifying and communicative elements of design objects. Being anchored in semiotics and semantics and having its roots in the scientific approach to product design at HfG Ulm in the 1960s, product semantics evolved from the 1970 as an ambitious approach to describe elements of signification and meaning-making in products. In this way, design theorist (and former student at HfG Ulm) Klaus Krippendorff (1989, 12) has phrased the sentence that "form follows meaning" as "people do not perceive pure forms, unrelated objects, or things as such but as meanings." Of significant contribution, proposed by Jochen Gros (1983), is the differentiation of communicative function in formal (including a formal aesthetic function), symbolic, and indicative functions (cf. Steffen 2000; Schwer 2014).[22]

In this context, the indicative function (in German *Anzeichenfunktion*) is of most interest because it operates as the means of the object to point to aspects of type of object, function, handling, and operation.[23] A portable loudspeaker has the *Anzeichen* (outward appearance) of a loudspeaker; it resembles other loudspeakers and, in the case of the rather abstract expression of the Beolit 17, has a leather strap and many small holes in the cabinet. The five buttons of the Beolit 17 testify to it belonging to the category of more or less technical apparatuses whose operation needs to be learned. Further, the specific character of the Anzeichen of the buttons may not only indicate the operation of the object but also establish associative connections to other objects employing the same kind of Anzeichen: for example, the minimalist Braun aesthetics in the case of Beolit 17.

Human-computer interaction In contrast, on-screen interaction has been the interest of the field of HCI. With a broad scope of interest in "the interaction of users and technological artefacts" (Engholm 2010, 145), HCI has developed as a response to the challenge posed by the emergence of

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computer technology and the resulting new types of digital interfaces, with special, but not exclusive, attention to on-screen interfaces. Importantly, HCI evolved with the "historical transformation of the computer" in the 1960s and 1970s from a highly technical tool for professionals to a personal object for interaction, play, and leisure (Kaerlein 2018, 188). Part of this change was the focus on user-friendliness and development of the graphical user interface (GUI) as a means to have an easy interaction with computers, something which, in the words of design historian Paul Atkinson (2014, 89), "changed forever the way people think of computers." In relation to this shift, the field of HCI has moved from being primarily concerned with function and efficiency in interaction to larger considerations of the user's social context and emotional responses, whereby the "focus of HCI design has expanded from *interface* to *experience*" (Jung et al. 2017, 26, their italics).[24]

Smartphone Functional Ontology

One central approach to analyze the role of interfaces of smartphones is to see the smartphones as portable, small-sized computers. The screen signifies "computer," and the key question is which role the screen plays as a part of the material object and what the implications are when the interface is "nested" within the object (Redström and Wiltse 2019, 145). In this way, media researcher Timo Kaerlein (2018) points out that the smartphone creates and enables a new kind of "intimate computing" (199) and stresses the role of the graphical interface to evoke playful and sensually aesthetic interactions. In his analysis, the smartphone employs a miniaturization of technology that strengthens the "trend towards the playful, the aestheticization of interfaces, and the so-called user experience" (195).[25] In a deconstructive reversal of the notion of the interface on the borderline of two predefined entities, subject and technology, Kaerlein argues that the interface "is active at the constitution of what is being understood as the computer as medium and the human user, respectively" (185). Through this notion of interface constructing what it is an interface of, Kaerlein claims the interfaces of smartphones contain an "aesthetic strategy of connecting subjects and artefacts" with the purpose of nurturing a "playful use of intimate [nahkörperlich] media technic" (201). In this way, the interface becomes most central in making the smartphone relevant for the user.

The interface opens possibilities but provides, at the same time, only restricted access to the operating technology of how these possibilities are

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generated. In a critical stance, media researcher Wolfgang Hagen (2018) points out that the "smartphone is a computer simulating a smartphone," meaning that the smartphone is a computer but should not be perceived as such (75). Through its interface, the smartphone offers a reduction of "computer complexity," but it does so by providing access to the interface through programmed apps and not access to the operating system. This closed interface may lead to high usability and a seeming empowerment of users in navigating in an overwhelming amount of information, but what is seen as "usability" is not decided by users but by corporations promoting an endless line of new updates of apps and operating systems (cf. Röller 2018), which, at the same time, require ever new devices.[26]

On this point, the smartphone is part of a larger paradox that characterizes digital culture. On the one hand, ever more possibilities of information exchange and social connectivity are possible; digital technology has truly empowered people in reaching beyond themselves to engage in a (potentially) global dialogue. On the other hand, the scene for doing this is determinately set by large corporations, which at the same time capitalize on the data they harvest from their users, resulting in surveillance capitalism. The societal condition is increasingly post-democratic (cf. Stalder 2016), which means that participation is possible but influence and codetermination is low. In this way, social networks such as Facebook, WhatsApp, or Instagram may seem to allow users to communicate, but what they also do is *control* the communication in a nonnegotiable way. We may believe that we can communicate freely, but the frame is always set.

Materially, the screen is a defining element of the smartphone as a digital object. Through the screen, the possibilities of the interface are enabled in a "framing of how interior and exterior are functionally related to each other" (Redström and Wiltse 2019, 157). Seen in relation to the music system of the loudspeaker and the smartphone, the screen of the smartphone offers an entry point into operating the whole system, which in containing functional, aesthetic, and experiential potentials creates meaning and relevance for the smartphone as a material object.

Further, several layers of Anzeichen may be present in an object such as the smartphone. On the material object of the smartphone, the large screen in off mode indicates "digital multifunctionality." In contrast, the small screens of earlier mobile phones do not to the same degree work as access points to an interaction with multiple possibilities. Turning on the

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smartphone, the GUI appears with its apps on a vertically and horizontally movable grid. The Anzeichen of the grid is to indicate how to navigate the menu, and the apps indicate their function by employing more or less conventional icons whose meaning often are constituted by habitual use (e.g., the Facebook app is indicated by a white "f" in the font of the corporation on a blue background).

Intersection of Material and Digital

Characteristically, the material manifestations of the Beolit 17 and the smartphone are simple expressions of their many opportunities. As different types of digital objects, however, they express these possibilities in different ways and for different reasons. Most of the interaction of the smartphone goes through its on-screen interface, and the material object is designed to facilitate access to the screen. In this sense, the smartphone resembles the formal simplicity of other computer formats, such as tablets and laptops, and the external design variations are very few. Only the capacity for data storage and the wireless connection set the limit for the possible uses of the smartphone. With regard to the smartphone as part of a music system, the data storage capacity and the wireless connection allow it to be the access point to and integrative object for the music to be transmitted to the loudspeaker. It operates as the interface to the Internet and to streaming services. In comparison, the simple expression of the Beolit 17 relates to minimalist apparatus design and the downplayed design idiom of B&O. But the connection to the smartphone is vital, as the central part of the interface for playing music goes through the smartphone. The five buttons on the Beolit 17 only operate on/off, volume control, and connections, not the choice of music.

In this way, the minimal number of buttons is only made possible by the whole system that the loudspeaker is a part of, and indeed, the almost buttonless device has become the norm for other, similar products, such as the models by Marshall or Vifa (figure 6.5). Because of the small number of buttons and the smartphone-based operation, these objects require little sensory engagement to function. Instead, they may attract attention through nonfunctional elements, such as the high visual appeal of their minimalist design, the tactile sensation in the use of materials (wool at the front in the case of Vifa), the smell of the material and fabrics, the quality of detailing in smooth assembly, and the touch and sound of the buttons.

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Figure 6.5
Copenhagen 2.0, 2018. Loudspeaker manufactured by Vifa.

Conceptual Values

Many digital objects are designed to be well-functioning consumer electronics products seamlessly integrated into everyday practices, such as listening to music. Objects may, however, stand out in a positive sense because of the aesthetic-sensory qualities of their materials, functions, and interaction. One could argue that Beolit 17 is such an object, designed to create an appeal by sensory means, and the same could be said about high-end smartphones

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such as iPhones or Samsung Galaxy top models. In most instances, these products are not intended to evoke a conceptual reflection on what they are about; instead, they are intended to submit to their function and to lead to positive appreciation by virtue of being well-functioning. They are not intended to attract attention by not functioning well!

Nevertheless, a key aspect of the post-material aesthetics of digital objects is the conceptual dimension of aesthetics. The conceptual dimension may be present on two levels in digital objects: (1) as a reflection of idea content and ways of meeting the world, as in any other design object, but in a way where the technological component is central for the idea or for enabling this meeting, and (2) as a direct reflection of technology. I will deal mostly with the last one as a special feature of the post-material aesthetics.

Conceptual Values of Meeting the World

As other designed objects, digital objects may contain ideas that are reflected through their material manifestations and the way the objects, by being digital and interactive, stage dynamic meetings with the world—that is, how they produce a meeting with the world that allows new kinds of meeting this meeting of the world (cf. chapter 3). The point is that the technological component is vital for the ability of digital objects to create this kind of reflective meeting. In the case of the Beolit 17, the impact of creating new world meetings lies in the inner potentialities of being not merely a static, material object (which it also is) but also a dynamic object of interaction. In use, the Beolit 17 is constituted as a personalized, changeable design object, capable of creating new patterns of engagement in its wireless interaction with, first, a smartphone and, second, surroundings that are increasingly pervaded by wireless information. In combination, the loudspeaker and the smartphone entail new ways of engaging with and consuming music and function hereby as an interface for meeting new possibilities.

Further, the rather enigmatic appearance of the Beolit 17 may be a reflection of what kind of object we are facing. Its minimal block-like form contains few Anzeichen of the function and operation of the object. This closed structure of the Beolit 17 is (as pointed out previously) enabled by its being a digital object whose actual interface is to be found on the smartphone. Hereby, the Beolit 17 may connote the "black box" design of early technological artifacts and, in principle, evoke responses of defamiliarization or alienation. This kind of object may entail the kind of conceptual

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reflection described in chapter 3 with reference to Kant: We may recognize a sensual material, but we may not know what the idea behind the object is, or even what kind of object it is. So, we have to make a "reflective judgment" and search for the right conceptual meaning. Of course, as Forsey (2013a) rightly has pointed out, this process in relation to design often requires "some amount of conceptual knowledge of the purposes we attribute to the objects we encounter," whereby design, in Forsey's analysis, relates to "dependent beauty" in opposition to "free beauty" (148). Even if consumers may not be surprised by what kind of object the Beolit 17 is, its design may, in its slightly enigmatic character, deliberately play on and evoke conceptual doubt situated between alienation and recognition of product type and historical references, such as, for instance, a reference to the portable transistor radio/phonograph TP1 designed by Dieter Rams for Braun in 1969 and also featuring a leather strap.

Conceptual Values of Reflecting Technology

A central aspect of the post-material aesthetics of digital objects is to open for a reflection of the role of digital objects in the world and in their context, which, ultimately, has to do with their ability to be mediums of digital technology and to reflect this ability. The central question is how digital objects stage meetings with digital technology and if and how they reflect themselves as artifacts of digital technology.

To grasp this question more deeply, I will revisit at some length one of the early texts on digital artifacts—namely, designer and design researcher Anthony Dunne's seminal 1999 book *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design*.[27] What makes his book interesting and relevant for my examination of a post-material aesthetics of digital objects is its conceptual and experimental approach to the question of design and technology at an early stage of the formation of digital objects, often by Dunne termed "electronic products" (e.g., Dunne 2005, xv), before they became consolidated and dominant in product culture. Today, in a much more pervasive digital culture, it might be more difficult to see the same fractures that Dunne explores, so the issue is making today's hidden fractures open.

In the book, Dunne investigates design "as a critical medium for reflecting on the cultural, social, and ethical impact of technology" (Dunne 2005, xii), whereby he focuses on the "cultural function of the electronic object" because "ever more of our everyday social and cultural experiences are

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mediated by electronic products" (xv). His method is to submit electronic products to artlike experimentation and critical examination whereby he aims to question and challenge what electronic products are, how they relate to us, and how they evoke new kinds of experiences. In a summation of his project, he states that his critical approach is to go "beyond optimization to explore critical and aesthetic roles for electronic products," to use "estrangement to open up spaces between people and electronic products to discussion and criticism," to design "alternative functions," to explore "narrative possibilities" in these objects, and to develop "forms of engagement that avoid being didactic and utopian" (147). Two aspects are relevant for my discussion of how digital objects stage a meeting with digital technology: the nature of the object and the relation to the user.

The digital object In an analysis of the "electronic as object," Dunne (2005, 5) points to different ways of addressing the "conflict" of "the solidity of the object" and the "fluidity of the electronic media," which in present-day terms would be elements of digital technology. Hereby, he sees electronic objects as a negotiation of solid and fluid and of delimited material and unlimited immateriality. Dunne's discussion points toward concepts such as "pervasive computing," "ubiquitous computing" (e.g., Ekman 2012) and "intimate computing," all designating different approaches to let digital technology leave the fixed frame of the desktop computer and be integrated in everyday objects.

Dunne proposes four models, and whereas he primarily relates them to experimental projects, I will briefly relate them to contemporary developments:

1) In the first model, the object functions as *package* for electronic technology. This model is a default and applies to much contemporary consumer electronics. The object carries its necessity as a container or conveyor of the technological content.
2) In the second model, material and electronic appear in a *fusion*—that is, in a full integration of "matter and information" (Dunne 2005, 9) in smart materials, which today especially can be found in textiles incorporating sensors and actuators or in the "tangible interfaces" (mentioned above), where the tangible elements of the interface also are technological components.
3) The third model is of *dematerialization*, which should not be seen necessarily as the disappearance of the material object but as a new way of

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integrating interfaces in the objects, much in accordance with the model of fusion. Examples of dematerialized digital objects can be seen in interfaces of gesture or voice control that work with different "sensual interfaces than screens" and hereby "offer new aesthetic experiences" (17).

4) In the last model, the material and the electronic are *juxtaposed*. With "no attempt to reconcile the two," the juxtaposition accepts that this relationship is "arbitrary"; that is, there is not a motivated connection between electronic/digital content and object form. This model is more conceptual than applicable to actual design, but it raises the question of how to (re)locate "the electronic in the social and cultural context of everyday life" and to link the "richness of material culture with the new functional and expressive qualities of electronic technology" (19). In this way, the challenge today may be how to go beyond the increasingly conventionalized designs of consumer electronics (or have they just found their "right" form?) and ask how rich, diverse materiality and ever new hyperfunctional possibilities can meet in new kinds of digital objects.

By proposing these models of "the electronic as object," Dunne gives way for a reflection of how digital technology is integrated in material objects. In addition, the four models may be employed as an analytical tool to differentiate and investigate how solid material and fluid digital content are blurred and meet in objects. As a next step, the question is how material objects by different kinds and degrees of integrating digital technology display or reflect their technological component. By "reflection," I aim to conceptualize the way digital objects communicate themselves as "digital" or "technological" to consumers; I also argue that existing consumer electronics products on the market, and not only experimental projects, can be submitted to such an analysis.

In the case of the Beolit 17 and the smartphone, different ways of relating to "technology" are present. The smartphone seems to be a highly compact *package* for the content of digital technology. It is fit for performing its task as a high-performance, multipurpose consumer electronics product and appears as a highly technological product. In this way, it communicates its "technological" nature while at the same time appearing sensually appealing. On the other hand, smartphones may also be argued to employ elements of *fusion* and *dematerialization*, because their interfaces are operated directly by touch or by the immaterialized medium of the voice. The smart interface fosters new modes of tactile or sensory interaction (touch

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and voice), which is also a new way of fashioning a new kind of relationship between the user and the possibilities afforded by technology. As users and consumers, we are quickly engulfed by a habitual nonawareness of our engagement with these artifacts, but the point is that smartphones in their object design (of which the screen with its interface is a central part) pack, merge, and dematerialize technology in a way that has a profound impact on the user's meeting and engagement with technological possibilities.

The Beolit 17 communicates and reflects "technology" in a different way. While the smartphone with its large screen is part of a larger family of computer devices (including the tablet computer), the Beolit 17 is more closely related to traditional radio design, including designs from the predigital age.[28] At the same time, the interface is to some extent dematerialized because the speaker is operated through the smartphone. Still, the material presence of the object remains intact. Created by a designer who generally specializes in furniture design, the Beolit 17 may appear more as a decorative domestic object than as a high-tech consumer electronics product. This quality is supported by visual mediation (which can be seen as part of the contextual dimension of aesthetics). In product photos distributed by the manufacturer, the Beolit 17 is associated with certain aspects of a modern lifestyle, specifically the affordance of the pleasure of slow living with break time, combined with traditional, "analog" values (coffee, books, traditional, handcrafted furniture) (figure 6.6). Seemingly, the natural habitat of Beolit 17 would be more low-tech than high-tech (another image from B&O Play shows a lot of nondigital social interaction among a group of friends), and its conceptual values are more related to lifestyle than to cutting-edge technology.

Nevertheless, the raison d'être of the Beolit 17 is to offer a smart, technological solution using digital technology. Beolit 17 is a package of technological content. Further, it naturalizes smart technological solutions, incorporating them into an otherwise nontechnological, analog, and lifestyle-oriented setting. A part of this strategy of naturalization is to let the interface be as simple as possible. The buttons do not express a fusion of material and digital or dematerialize the digital context. However, operated through the smartphone, it could be argued that some kind of dematerialization of the interface takes place. You can talk to the smartphone and the speaker will play music. The point is, the Beolit 17 in its object design communicates and reflects "technology" by concealing and displaying it at the same time.

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Figure 6.6
Profile image for Beolit 17. B&O Play, 2017. Photo credit: Bang & Olufsen.

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Its approach to technology is, on the one hand, to naturalize and integrate it seamlessly into our world and, on the other hand, to point to itself as the specific site where this process takes place. In this way, the Beolit 17 reflects technology by positioning itself as a mediation of it.

Affecting users The ontology of the "electronic as object" has implications for how the object appeals or relates to the consumer, as already testified in the analysis above. In *Hertzian Tales*, Dunne's point is to highlight and investigate the "distance" between electronic objects and people and to not cover up this distance with strategies of user-friendliness, where we use the objects habitually without noticing them. Instead, he argues for the potential in "poeticizing" the distance to explore "user-unfriendliness" and interactivity as located between "transparency and opaqueness" (Dunne 2005, 22). His point is that strategies of alienation or estrangement may lead to investigations of new experiences with electronic objects.

In her analysis of the relationship between design and technology, Annette Geiger (2018) criticizes technical design for letting usability lead to a lack of alternatives in use, whereby the design, on the one hand, in the words of the philosopher Peter Sloterdijk, evokes a "simulation of sovereignty" allowing the user, as an example, to find their way through traffic, while, on the other hand, the user loses control of the situation, such as of their specific location in the traffic. Geiger points out that technology may reduce complexity, but that a total immersion of technology, such as when blindly following Google Maps to a destination, hides the operation of technology and makes it omnipresent.[29] Exactly the opposite happens when the goal is "poeticizing" the distance between users and objects: to let the operation of the objects be clearly visible and let its "construction of meaning [Sinnstiftung]" be raised through "the aesthetic perspective of the possibility of being other" (Geiger 2018, 111).

Dunne (2005) terms the electronic objects in question to be "post-optimal" because their "practicality and functionality can be taken for granted" and their aesthetics could "provide new experiences of everyday life, new poetic dimensions" (20):

> If user-friendliness characterizes the relationship between the user and the optimal object, the user-unfriendliness then, a form of gentle provocation, could characterize the post-optimal object. The emphasis shifts from optimizing the fit between people and electronic objects through transparent communication, to providing aesthetic experiences through electronic objects themselves. (Dunne 2005, 35)

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The question is, then, which kind of aesthetic experiences this strategy of distancing and defamiliarization leads to. However, Dunne does not define what he means by aesthetics or "aesthetic experiences," and he often just speaks of "new" aesthetic experiences or "design aesthetics" that may nurture "more poetic and metaphysical relationships with the artificial environment of technological artifacts" (xvi), without specifying its specific nature.

The last part of the last sentence in the long quote above does, however, indicate *when* aesthetic experiences take place. They take place when the electronic objects are not just transparent vehicles or media for some purpose. Hereby, aesthetic experience in Dunne's conception can be said to consist of two elements: the objects, which by different means attract attention, and the nature of experience, which gains a different character by being defamiliarized, hindered, or slowed down. In the first instance, Dunne privileges an experimental or even avant-gardist appearance in order to let them attract attention; ever since *Hertzian Tales*, Dunne's own works of design have had this artlike character and have, consequently, mostly circulated in galleries and publications, not as mass-manufactured objects (cf. Dunne and Raby 2013). Next, Dunne implies a pragmatic understanding of experience *as* aesthetic when experience is being accentuated, reflected, or having a special character.

The question is, then, what the *effect* of this aesthetic experience is, when it is said to have "poetic and metaphysical" character. In my terms of design aesthetics, the answer is that the strategies of defamiliarization and distancing may evoke a sensual as well as conceptual engagement with digital objects. A sensual engagement can arise because these objects do the opposite of vaporizing as material objects. Instead of digitally dematerializing because of their element of digital technology, they block the view and attract attention as material objects, in the same way that the digital was turned into an obtrusive material in the Wi-Fire installation (figure 6.3). At the same time, estranged digital objects may encourage a conceptual reflection about the role, character, and nature of experience and digital objects. The Wi-Fire installation invites a conceptual reflection about the material appearance of digital technology: What does digital technology look like, and how does it affect us?

Further, Dunne (2005) makes an interesting argument for the effects of electronic objects for framing experience. These objects can "generate a conceptual space where interactivity can challenge and enlarge the scheme

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through which we interpret our experiences of using everyday electronic objects and the social experiences they mediate" (81). In this dense formulation, Dunne engages in a Kantian reflection of cognition, where conceptual schemes and sensual matter meet. Dunne's point is that conceptual schemes and digital objects coproduce each other. New ways of engaging with digital objects, which are inherently dynamic and interactive, call for new conceptual schemes through which we build knowledge, and these schemes in turn cast new light on how we engage with digital objects. In this way, a conceptual reflection of digital design not only deals with the objects only (and how they may encourage a reflection of what they are about) but also with how the object may challenge given patterns of understanding.

Creating conceptual schemes Consequently, an important aspect of the conceptual aspect of digital design is how strategies of reflection are employed and contribute to create new modes of understanding. An experimental approach can be seen in the work of the German textile designer and design researcher Katharina Bredies. She investigates how the dynamic of digital technology may not only provide new functions but also lead to new modes of *use*. In her work, "material appearance and electronic function" are juxtaposed by, for instance, incorporating sensors and actuators in textiles. Much in accordance with Dunne's approach, she explores how the deployed digital technology may "offer a way of estranging (i.e., making strange) the taken-for-granted world around us" and hence open new possibilities of use (Bredies 2015, 46; see also Bredies 2014).

An example of her work is the quilt blanket *Undercover* (figure 6.7), which also is a record and playback device for audio messages. If folded in the right way, sewn-in magnets make electronic contact and activate the device in one of eight possible ways. The pattern, although it is difficult to decode, indicates how the patches should be folded toward each other. In its combination of soft textile material and "hard" electronic components, Undercover is an exploration of what an interface of digital technology can be like. Sensorially, it encourages a tactile and bodily engagement with the soft fabric. Conceptually, it "makes strange" or defamiliarizes what an interface is and how to interact with the object. The digital is dematerialized by merging with a traditional type of design, the quilted blanket, which normally does not contain any technological features.

Thus, what produces the "estrangement" and defamiliarization—and, perhaps, surprise—is the fact that this particular design can actually

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Figure 6.7
Undercover (Nameless Object #3), 2010–2011: a patchwork quilt with built-in playback device for audio messages. Design and photo credit: Katharina Bredies.

facilitate digital content. Of course, one may also use the blanket simply as a blanket, but when one begins to realize and explore the digital content, the nonhabitual use of it may entail the "poeticizing" of the distance between technological objects and people and spark reflections on the relationship between humans and technology.

Implied in this kind of conceptual reflection of object, use, and experience is a reflection of technology. The technological component is always central in enabling how the object frames experience and use—that is, how the conceptual scheme may be enlarged, to refer to Dunne. It may be that the core conceptual reflection of Undercover is a reflection of new kinds of uses, which are enabled by a new kind of digital object with a soft, tactile interface, but it entails at the same time a reflection of what an interface is and how this object can be conceived as a technological artifact. Thus, my claim is that this kind of experimental digital object, where technology is explored for its potential for creating new kinds of objects, uses, and

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experiences, also implicitly evokes a reflection of the role of technology for the object and the conception of "technology" in play.

Do nonexperimental design objects—that is, marketed consumer products—reflect "technology" or "digital technology" in the same way? Most consumer electronics products are not intended to be alienating, defamiliarizing, or opaque; indeed, they are meant to be user-friendly and transparent.[30] They are not intended to encourage a reflection on "technology" but to be technological in effect. Ultimately, however, every technological object has the potential to encourage reflections on the way in which it is "technological" and how the object affords and communicates its technological features to consumers.

First, the questions are how visible the technology is and whether it is made to be intimate, to be pervasive, or even to create an illusion of disappearance. I argue that we can talk of a *spectrum* of degrees of defamiliarization where experimental projects may have the highest degree of defamiliarization. However, even ordinary consumer electronics products, such as the Beolit 17 and the smartphone, may be "defamiliarizing" in their closed, enigmatic appearance.[31] As discussed above, digital objects may be defamiliarizing when their surfaces do not explicitly reveal their function or operation. Instead, we have learned to understand seemingly simple screens as entry points for all different kinds of function and interaction. The kind of arbitrariness of form and function, which is due to the workings of digital technology, leads constantly to unexpected forms for hitherto unimaginable functions. In this way, consumer electronics products may be positioned on the market as "innovative," creating a defamiliarization that, in the next instance, at an increasingly high pace gets normalized and habitual.

Beyond Materiality?

To conclude, let me sum up some of the insights in this chapter, which will raise new questions rather than provide definite answers. The main argument of the chapter has been that digital technology has changed—and is changing—object design. New kinds of digital objects in the form of consumer electronics products have developed, such as smartphones, digital loudspeakers, and USB hubs. Accordingly, the decisive question of the chapter has been how the aesthetics of these objects can be conceptualized.

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The starting point for this conceptualization has been to address the conditions of "digital culture" and to contest the ontology of digital objects. On this basis, I have proposed the aesthetics of digital objects to be post-material. This concept is not intended to imply that digital objects abandon materiality to become dematerialized objects of immaterial information streams. By contrast, my starting point has been the material objects as points of interaction with the possibilities of digital technology. But I propose that their aesthetics is post-material, as these objects transgress even their own materiality in their use of digital technology and wireless connectivity to exchange information with other objects and to form new networks with them. Furthermore, in my exploration of the post-material aesthetics, I have examined the implication of their interactivity and multifunctionality for their appearance as objects and different modes of conceptual values in the objects, such as a reflection of "technology."

In my view, aesthetics is a central way of understanding and investigating the communication and appeal of objects, and in the case of digital objects, we have just seen the beginning of the blurring of material and digital, which form an important part of our environment today.

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7 Aestheticizing Perception of Design

> Ils vivaient dans une monde étrange et chatoyant, l'univers miroitant de la civilisation mercantile, les prison de l'abondance, les piège fascinant du bonheur.
> —Georges Perec, *Les choses*[1]

Essentially, the meaning of design objects is set in motion when humans engage with them. *It takes two to tango*. When being used and consumed, design objects actualize their potential for operating as framing experience. In accordance, it is a core lesson of aesthetic theory that aesthetic meaning always evolves in a relationship of objects being aesthetically coded and humans engaged in aesthetic perception (cf. chapter 3).

In this chapter, I will enter a cultural contextualization of design in a discussion of the constitution of *aesthetic perception in the case of design*. In this context, aesthetic perception operates as a subjective appreciation of objects for standing out in some way through their sensual appearance and/or ability to encourage conceptual reflection. Aesthetic perception relates intimately to the concept of aesthetic experience and its logics of relating judgments to various aesthetic categories (chapter 4), but it deals more directly with how subjective attention is being directed toward aesthetic aspects of design and how this act is facilitated. That is, how perception can be "set" or "attuned" toward aesthetic qualities of designed objects. Empirically, as will be discussed below, this kind of perception often privileges objects for "standing out."

Aestheticization Investigated

The underlying assumption is that this kind of perception not only is dependent on and elicited by internal qualities of objects themselves, as

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these may be negotiated in design practice (cf. chapter 5) or perhaps relate to digital technology (cf. chapter 6). Aesthetic perception is also facilitated by external contextual factors surrounding objects, such as media and different kinds of articulations of the qualities of objects. Further, as part of the cultural contextualization of design, we enter the sphere of consumption where the meaning of design objects is being actualized. Hereby, design shows its participation in the "bedazzling universe of market culture," *l'univers miroitant de la civilisation mercantile*, whose character as fluctuating between solid materiality and shimmering dream-images, between the "trap of happiness" in the "prison of abundance" and feelings of emptiness and disappointment, the French novelist Georges Perec (1936–1982) depicts in his short 1965 novel *Les choses*.

As discussed in chapter 3, the cultural and historical process by which design is made to be perceived as aesthetic can be labeled *aestheticization* and set in relation to, for instance, actors and institutions with the power to exert something as "aesthetic," such as magazines, museums, journalists, influencers, or, even nation-states.[2] Hence, "aesthetics" is not characterized by essentialism; instead, objects are rendered aesthetic by various constructive means. On this basis, my focus in this chapter is to analyze means and effects of *aestheticizing perception*—that is, ways that consumers are encouraged or even steered to perceive and experience design as "design" and as having aesthetic qualities. On this basis, my interest is mechanisms in the cultural context of design for constructing conditions for having aesthetic perception.

The chapter is organized in two sections. In the last section, I investigate the aestheticization of perception in two instances: as construction of seeing-something-as-special at the 2017 exhibition *Everyday Life—Signs of Awareness* and through the role of mediation for contributing to framing aesthetic perception, especially in digital media. First, though, I will present central traits of aesthetic perception through a small-scale empirical study on the articulation of aesthetic preferences among consumers.

Aesthetic Perception

In philosophical reflection, aesthetic perception is mostly seen through the prism of a generalized subject-object dichotomy. In a line from Kant ([1790] 1995) to Forsey (2013a),[3] it is treated as an aspect of epistemology; that is, as a question of the conditions for humans to gain knowledge about the

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world. On the same structural level, the aesthetic relationship is based on coded objects and generalized subjects being conditioned to perceive something as aesthetic.

In the book, I have hitherto laid the emphasis on coded features of design objects and not on subjective perception. As an empirical factor of aesthetic perception of subjects, *consumption* gains in importance. The sphere of consumption is the instance in the cultural circuit of design where the meaning of objects is transferred to consumers (cf., e.g., McCracken 1988); hence, the aesthetics of objects is being actualized in "real" contexts. Taking an interest in consumers and their practices, consumer research has on these grounds investigated the "aesthetic encounter" in consumption (Csikszentmihalyi and Robinson 1990), concepts of "aesthetic consumption" (Charters 2006), "aesthetic subjects" (Venkatesh and Meamber 2008), "aesthetic experience" of "product design" (Lam, Liu, and Lam 2016; Haug 2016), and "aestheticization as a multilayered consumer cultural process that involves consumers, brands, and markets" (Dagalp and Hartmann 2021, 7). Hereby, consumer research carries important insights into "the role of aesthetics in everyday consumption practices and experiences" (Venkatesh and Meamber 2008, 45) and the interaction of consumers and markets. "When consumers are aestheticizing consumption practices, they . . . contribute to the aestheticization of those brands they consume in practice performances" (Dagalp and Hartmann 2021, 15).

In taking a narrower look at design, my entry into investigating aesthetic perception is to focus on mechanisms for staging and framing, hence aestheticizing, the perception of design. I will therefore not focus on individual emotional responses among consumers as investigated in psychological or neuro-aesthetic studies (e.g., Skov and Vartanian 2009; Kozbelt and Kaufman 2014; Blijlevens et al. 2014). Instead, I will look at constructive and dynamic processes of aestheticizing perception in the dynamics between consumer responses and formative mechanisms in the cultural context of design: how "inside" perspectives of consumers (dreams, aspirations, etc.) meet "outside" perspectives of aestheticizing effects of markets, brands, and actors.

Studying Aesthetic Preferences

As an outset for discussing core traits of aesthetic perception, I will take a starting point in the framework of sensual, conceptual, and contextual

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dimensions of aesthetics (cf. chapter 3) and relate these to the aesthetic categories based on modalities of design objects (cf. table 4.1). My conceptual framework of modes of aesthetic perception is substantiated by testimonies from a small-scale empirical investigation on aesthetic preferences among consumers, which was conducted in 2015 and 2016 by research assistant Kristina Hansen Hadberg under my supervision.[4]

Our investigation consisted of qualitative interviews with 16 consumers, divided into two groups: one made up of students from our design programs at the University of Southern Denmark and one of respondents from outside the university. It was originally designed to prepare a larger investigation exploring what consumers perceive and articulate as "aesthetic" qualities in design objects and how these are constructed by actors in the cultural circuit of design.[5] For this purpose, the conducted investigation is too small and, further, too biased in the (pragmatically motived) choice of participants to ensure a valid or representative knowledge of aesthetic preferences among consumers. We started out by interviewing students, then worked on finding interviewees in wider circles.[6]

Our starting point was the respondents' homes and decor, but we also brought objects and visual mediations for them to reflect on—for instance, the Cube Click Clock (figure 6.2) and ads for Vegetal (cf. figure 3.1). The focus on domestic spheres and home decor, ultimately dealing with lifestyle settings, may be a limiting factor, as it only takes a specific part of the field of design into account and not, for instance, industrial design or design in the public realm. At the same time, nevertheless, the domestic sphere has a proximity to everyday life, which makes it suitable as a catalyst for articulating personal preferences. As a meta-exploration of how to explore aesthetics as a part of consumer preferences, the investigation indicates what aesthetic preferences are and mean for the interviewed consumers and what is indicative of structural traits of aesthetic perception. On this basis, the study is informative for the present purpose.[7]

In the investigation, we followed my theoretical proposal of aesthetics in design and aimed thus to investigate consumer preferences in relation to sensual, conceptual, and contextual dimensions of aesthetics. Especially, we attempted to explore the impact of sensual qualities, the ratio of conceptual aspects, and the effect of aestheticization on aesthetic perception. We avoided introducing the concept "aesthetics" at the beginning at the interviews, as we noticed in Venkatesh and Meamber (2008) that consumers

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were "blocked" by the concept and that as an emblem, it became affiliated with traditional notions such as "art," "beauty," or "outer appearance."[8] One of our respondents associated "aesthetics" negatively with "high culture," the "academic world," and "doing what is right" (respondent #15, female, age 25). In the interview design, we started by asking openly about consumer preferences and concluded by discussing the concept of "aesthetics" directly.

Sensual Aspects

In relation to the sensual dimension of aesthetics, the general question in this context is how design objects are perceived to "stand out" in their sensory qualities and their abilities to enter people's life worlds. The two categories relating to form and function are relevant in this context: "functional realism" privileging the honesty of appearance in relation to function, and "formal simplicity" as a signum for the ability of form to reduce complexity and encourage simplicity and purism of form.

The value of function In this way, several of the consumers in the investigation appreciate the form and appearance of the design, which more common than not is seen in an interplay with function or as an expression of function. Perhaps encouraged by the interview situation, consumers thus articulate an aesthetic perception that is genuinely bound to design and not measured by standards of art. What is being evaluated is design objects as objects of purpose. Regarding consumer reactions, Venkatesh and Meamber (2008, 47) propose a division of "intrinsic" value versus "instrumental" value; the former describes an artlike appreciation of "art pieces or aesthetic objects . . . for their own sake" and the latter a valuation on the basis of what objects can be used for. In accordance, Steve Charters (2006, 250) points to "disinterested attention," encouraged by products "capable of providing intrinsic value," which he even regards as a criterion for being an "aesthetic product."

In our investigation, objects are acknowledged for having aesthetic qualities but not for being "aesthetic products" as a category in its own right. Valuation based on sheer look or feel of texture is present, but instrumental value dominates. "Intrinsic" aspects are still part of aesthetic appreciation but subsumed under instrumental value.

Venkatesh and Meamber, as well as Charters, point out that consumers relate to objects based on intrinsic and instrumental values at the same time, even if, in Charters's formulation, "the intrinsic forms the dominant focus," which he relates to "beauty" and "expressive" features (Charters

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2006, 251). The general question is, then, what people value in objects. In the interviews, *function* are at the fore of appreciation. "I don't just buy things because they look nice; they also need to be something if I am going to use it—have a purpose, I mean" (respondent #5, female, age 22). For respondent #6 (female, age 23), objects can be surprising, but function must never be superseded by other concerns. Honesty is central for several respondents, who made statements such as "I like that things just are, like, are true to themselves and don't try to be better, or healthier, or more special than they really are" (respondent #11, male, age 27). Qualities of form are in focus, though—for instance, the "soft shape" of curved tables (respondent #15, female, age 25)—but always in connection with function and purpose. On these grounds, several respondents value a "balance between shape, color, and function . . . or a balance in the expression" (respondent #12, female, age 65) or, for instance, noted objects as "nice looking and useful" (respondent #9, female, age 27). Respondent #13 (male, age 64) makes a case of almost direct confirmation of the category of functional realism. Objects, mostly technical objects, are for him "beautiful" when being designed for optimal use. On this basis he states: "Construction and function and design. If you are able to combine these three aspects, then you have come a long way." Interestingly, and typical for public perception, "design" is here conceived in opposition to function as something "extra" concerning outer appearance.

Sensing Next, the aesthetic perception of form and function depends on the *distance* of sensual perception. First, a vital question is which senses are in play. On the one hand, visual perception is key, affirming a focus on outer appearance. A paradigmatic example is respondent #10 (female, age 51) who privileges a kind of visual fit, balanced in black/white with a few colors, where "things fit together." Her aesthetic perception through colors is, however, untypically extreme in the sense that she expresses an explicit disinterest in materials and, furthermore, clearly states that her preferences idiosyncratically are motivated by a detestation of everything brown, including wood, a dominant color of her childhood and youth.[9] The visual entry to aesthetic perception aligns with the focus in traditional aesthetic theory on the ocular and distanced and even disinterested experience. For respondents, the experience may have a visual tone, and aesthetics is affiliated with being "pleasing to the eye" (respondent #11, male, age 27) in the kind of hedonism analyzed by Colin Campbell (1987) as part of modern

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consumption, but it is at the same time always "interested" and invested with some personal meaning. Neither does it presume static objects nor, conversely, preclude dynamic, moving objects.

But being "interested" does not exclude a distance in view. The focus on the visual aligns with the tendency in the cultural context of design to experience design visually at a distance, especially in shopping (the window display being the traditional example) or in visual consumption through magazines or social media platforms. Several respondents confirm the tendency toward visual consumption, especially through interior design magazines, which I will deal with below in relation to the contextual aspects.

On the other hand, visual perception does not stand alone. The experience through *proximal senses*, especially touch, is a common thread in most of the interviews. The relevance of proximal senses for aesthetic experience has reentered aesthetic theory in recent years through its phenomenological focus on the body (e.g., Bhatt 2013) and the everyday (e.g., Saito 2017). As an example, respondent #5 (female, age 22) states: "I really like to touch things. And I think they [her favorite dinner plates] are beautiful to look at," also suggesting that singular senses do not stand alone but productively interact and contribute to each other. Auditive perception, based on another distal sense, is noted by respondent #13 (male, age 64) in connection to the sound of a motorcycle engine, which is described as "irresistible." While visual perception is explicitly noted and described by all respondents, the sensory feeling of tactility is present in most interviews but less clearly or consciously stated than visual perception. As paradigmatically stated by respondent #14 (male, age 32): "I guess it is a sense which I react to, I mean the sense of touch; it's just that I haven't really been used to talk about it."

Triggers for sensual engagement Typically, the sense of touch is intimately connected to *use* and the experience of *materials*, which obviously has a visual side to it but calls for tactile interaction and for being appreciated for qualities such as smoothness and solidity when touching. As an example, respondent #5 (female, age 22) expresses a fondness for hard materials such as iron, ceramics, and marble, all materials in fashion. She also relates marble to visual perception: "I am currently very fond of marble! I find it crazily beautiful; that it is never the same, that it is always different, too." Respondent #3 (female, age 21) has an equal weakness for copper, both in color and texture, which she initially detested but that "grew on her" as a marker of uniqueness and tradition and through its effect of shimmer.

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Furthermore, the genuineness and naturalness of materials are being positively evaluated, often leading to a "material realism" privileging honesty in accordance with "functional realism." For respondent #2 (female, age 20), heaviness equals quality: "A heaviness in material . . . it makes you think, 'Well, that's certainly quality,' and then connect it with something good or nice." Respondent #15 (female, age 25) expresses a direct negative judgment of the superficiality of laminated wood (in response to the Cube Click Clock) because she feels cheated by the warmness she visually associates with wood but does not experience when handling the clock.

A tendency in the interviews is to embrace *wood* with positive associations of quality and authenticity, often in contradistinction to plastics as a cheap and artificial material. In this regard, most respondents abide to a taste norm of "Danish design," which I will address below in relation to the contextual dimension.[10] Marble, however, falls outside this taste norm but can nevertheless be in fashion. In contrast, copper has been a part of Danish design history, especially in lamps. What is important to remark is that the tactile perception of materials and materiality is an integrated part of respondents' aesthetic perception; they do not "see" design as if it were "art" but have an aesthetic perception on the basis of the constituents of the design objects themselves.

For several participants, *contrasts* of form and/or material are important as part of the sensual appeal of the design, visually as well as tactilely. "They [contrasts] can be, like, heaviness/lightness, they can be in colors, or they can be in materials" (respondent #6, female, age 23). Contrasts may be in objects, such as wood contrasting steel, but they arise as part of the overall interior decoration. According to respondent #11 (male, age 27), a "tension may exist between things, or you may have some things where you feel that they have this tension."

> [Things may fit together] in some way. But where it still can be filled with contrasts to a degree and, to a certain degree . . . What do you call it? Not chaotic and not messy, but a little bit. What do you call it, exciting? So, it may be stimulating in some way, I think.

A common thread among all utterances about contrasts is that they are seen to be bound in a coherence in object or context. On this point, aesthetic evaluations of respondents regarding contrasts adhere to the principles of "unity-in-variety" as pointed out by the Unified Model of Aesthetics (UMA) project (cf. Berghman and Hekkert 2017, 136). Unities are made

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more interesting by variety such as contrasts, and variety is held together by the unity of objects, which often implicates a harmonious appearance. In making things more interesting and, possibly, objects of reflection, contrasts also contribute to the conceptual dimension of design aesthetics.

Conceptual Aspects

In the overall picture, sensual aspects of aesthetic perception dominate over conceptual aspects. In our investigation, design objects are to a very small extent being valued for their abilities to challenge concepts or debate "design" by contesting the categories of design or the characteristics of a given product type. In opposition, respondent #2 (female, age 20) negatively values one of the objects we introduced, the *Crinkle Cup*, a ceramic cup imitating a crumpled-up plastic cup (figure 7.1), because "I think I have an idea what a coffee cup should look like . . . this falls outside the form language [of cups]."

Elements of conceptual reflection Some respondents do, however, value what is "different" or "special" or is "being edgy." In this manner, respondent #14 (male, age 32) values the immediate unreadability of the Cube Click Clock: "I cannot understand how it is possible [*laughs*] . . . somehow it is just wrong that I consider how it works—but also great." Here, the appreciation is the opposite of functional realism as the clock is being valued

Figure 7.1
Crinkle Cup: handmade ceramics, 1975. Design by Rob Brandt.

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for not being honest about its function. Respondent #11 (male, age 27) acknowledges the ability of objects to attract attention not only based on the sensual appearance but also their ability to evoke reflection about their type. Commenting on lamps by the 1960s and 1970s designer Verner Panton, he states that "they are just very insisting in some way. By shining a lot. And many of them are very large and have a really, like, organic look."

In addition, our intervention may affect respondents' evaluation. In this way, respondent #12 (female, age 65) initially posits a negative evaluation of the Crinkle Cup ("I like something better when there is a meaning with its form") but talks herself into a positive evaluation, despite the initially stated meaninglessness of the cup:[11]

> Yes, on the one hand you might say that [it does not matter], and on the other hand, there's something really funny, interesting, about it because it's a kind of garbage. You're done drinking from that cup, and then you've thrown it away [but still] the plastic hasn't yet unfolded, and then you've taken a piece of garbage and made a cup out of it. So, it is interesting. Yes.

Along the response, she talks herself into an analysis of the conceptual value of the cup, volatile garbage made into a solid ceramic cup, whereby she applies a word that is often attached to conceptual appreciation: "interesting."

Nevertheless, such utterances are few and far between, and the low acknowledgment of design as conceptual aligns well with how design often is valued and positioned within the discourse of consumer culture as sensory appealing, well-functioning consumer goods. This appears almost as a confirmation of the analysis of Project UMA that the positive appeal of objects may stem from a combination of "typicality" and "novelty" (UMA 2017): It's OK for objects to be different, but not *too* different.

Valuation of idea contents Still, conceptual values lure in the background of most responses. These values relate to the aesthetic categories of "semantic reference," "artistic experimentation," and "contemporary newness." In common, these categories relate to the conceptual aspect of the *idea content* of objects (cf. chapter 3). In the interviews, though, the idea content is mostly related to some meaning beyond the object, such as the "story," the "intention" behind the product, or the way the product reflects a certain age. What is interesting is how the aesthetic categories in play may point the aesthetic evaluation in certain directions (sign value, the work behind the object, the reflection of an age) and that they are rearticulated as part of these consumer responses.

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Viewed together, the categories of "artistic experimentation" and "contemporary newness" open for evaluation the design object based on contextual circumstances. The category of artistic experimentation frames an appreciation of design resulting from artistic experimentation, and in close affiliation with the artistic focus, the category of contemporary newness provides a structure for appreciating how design may reflect its age of origin. In the interviews, these categories are mostly reflected as an interest in the designer, the innovative idea of the object, the brand, or the story behind it—for instance, as part of Danish design. "I think it [a wooden monkey used as a hanger] is great because it's Danish design. . . . There's a story behind it . . . an official story" (respondent #8, female, age 28). Thus, respondents do not testify to an interest in the actual (artistic) processes of the designer but in broader circumstantial factors of the becoming and being of the design object.

The artistic element in design, which was important in the historical discourse, is almost omitted from consideration. Further, the mode of temporal reference is being reformulated. If temporal concerns are present, objects are not appreciated to reflect a past model of contemporary newness but simply to reflect a historical past in relation to the heyday of Danish design—for instance, in the appraisal of designers such as Arne Jacobsen, Kay Bojesen, and Verner Panton. This kind of appreciation relates more to a taste norm (see below) than to an acknowledgment of the special "newness" of the designers in their own time.

The category of semantic reference plays a minor role, as only a few respondents reflect on the resemblance of design objects to entities outside the object itself. In the most cases, the objects resemble animals, not only in the mentioned monkey and other wooden animal figures but also in the case of a giant unicorn lamp (figure 7.2) with changeable lights that respondent #14 (male, age 32) is fond of:

> [The unicorn lamp] is like that dog [a dog-shaped lamp he has seen in a shopping window]. It has, like, such, like, forms, right? This one is not a horsehead and, well, those legs, they are also just . . . [*laughs*] . . . it's just fantastic . . . and it gets, like, hug-friendly, if you can put it like that?

In accordance with Sianne Ngai's aesthetic category for commodities (cf. chapter 4), the respondent connects his affection and care for objects like this with the "cute": "I guess I have a thing for, well, cute things, like the one you [the interviewer] saw when you entered the room. There you saw

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Figure 7.2
Giant unicorn lamp, Smoko Inc., 2014. The advertising text reads: "Our design embodies the silhouette of our favorite magical icon, the unicorn. It glows a soft-light and has a kick-ass multicolor mode." Design and photo credit: Smoko Inc.

that pink unicorn [a stuffed unicorn toy]." Whereas the concept of the cute is two-sided and ambivalent and can lead to "tenderness and aggression" (Ngai 2012, 19), the cuteness for the respondent is seemingly one-sidedly positive as "sweet" and "humorous."

Still, the "cute" is difficult for him to describe verbally and conceptually; instead, he circumscribes it by offering examples for comparison, such as other soft and furry plush animals. Nevertheless, he sees the cute in contrast to other elements of his home—for instance, "the kitchen table, which is very raw." Ultimately, then, the cute gains its meaning being a part of a system of oppositions that, in contrast to Ngai's concept of the cute, is transposed *outside* the cute object but is still important for the meaning of the cute object as a personalized object of affection.

For respondent #12 (female, age 65), who herself highly values a candleholder resembling a church tower, the capability of objects to evoke personal associations is central. She points to a tipping point between likeness and abstractness, where objects can be too abstract to incite any association. But an object "can also be abstract in a way where there still is something to reflect upon, so it may come to remind one of something or lead the thoughts in a particular direction." This kind of evaluation points in a

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different direction than direct object-related qualities such as formal simplicity or functional realism (the candleholder in question is even difficult to use). Instead, for this one respondent, the sign value of the object nourishes an appreciation of the meaning the object has for her.

Symbolic values Throughout the interviews, a common tendency is that objects are not foremost valued in conceptual reflections of meaning constitution, idea content, or as a debate on "design." Instead, the focus is on what the objects mean to respondents in what, with inspiration from Sidney Levy (1959), can be called the *symbolic dimension of design*: "People buy things not only for what they can do, but also for what they mean," and the "symbol is a general term for all instances . . . where an object, action, word, picture, or complex behavior is understood to mean not only itself but also some other ideas or feelings" (Levy 1959, 118–119). In a rough generalization, the symbolic meaning of object for respondents is, to employ Maurice Holbrook's (1999) concepts, related to consumer value, either "self-oriented" or "other-oriented." Resonating general theories on the formation of social identity (e.g., Dittmar 1992; Jenkins 2014), these two directions indicate that objects either gain meaning as a means of self-expression (i.e., reflection of personal identity) or operate as a means of communicating identity and status in a social context.

In the interviews, utterances of the home as an outward marker of status are relatively rare. Instead, self-expression is at the fore. Respondent #15 (female, age 25) considers how a lamp with an oversize socket in oak "says a lot about me": "I feel that when people see it, so they say, it says something about how I am as a person," as somebody who is a bit "special." This positioning does not take place as a marking of status but, probably because of her young age, is localized among a group of friends. "A lot [of friends] come here and think, eh, it looks really great," she says. In the same manner, respondent #14 (male, age 32) states that objects may say something about "who I am . . . and my kind of humor," but, characteristically, this self-expression does not have an external address. He feels that the objects express him, but he does not consider an audience. In any case, such testimonies buy into a "self-reflexive understanding of consumer culture as an arena for self-expression" (Dagalp and Hartmann 2021, 15).

In general, personal relevance or affection dominate in the interviews, and several personal stories are rather elaborated. Indeed, we noted that respondents talked more easily and eloquently about their relationship to

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objects than about sensual aspects of form and material. Personal identification with objects is most directly expressed by respondent #9 (female, age 27), commenting on a large metallic bowl: "It's so big and makes some noise . . . and I'm also like that. I think it is, like, a bit like my person, sort of. 'Here I come' without it being too much." Personal identification can result in projective anthropomorphism of objects, as if they have a "soul," which was notably in a story about a motorbike that, on a holiday abroad, brought its owner safely to a hotel before breaking down (respondent #13). A part of the "self-orientation" is the value people perceive the objects to have by confirming interpersonal relations, either as gifts (e.g., respondents #8 and #14), heirlooms (e.g., respondent #10), or objects evoking memories of friendships and episodes in life (e.g., respondent #9). Even if objects are appreciated for their form and function (and taste norms may play central roles for many respondents), the valuation of objects is often tinted by personal symbolism.

In their analysis of the "aesthetics of consumption," Venkatesh and Meamber (2008) claim that "identity formation using aesthetic experience" can be conceived as a "construction of the aesthetic subject," where the "subject is constituted aesthetically in the consumption of object[s] that have an aesthetic appeal" (51–52). In their view, to be an aesthetic subject is to confer aesthetic experiences to everyday objects; that is, to "extend" aesthetic meaning to everyday objects or to "view" them aesthetically.

I will, however, claim two problematic elements in this assumption of an "aesthetic subject." First, they assume "aesthetic" qualities to be special, as "artful" or an "extra" of outer appearance unrelated to function. This conception stands in opposition to the integrative approach to design aesthetics that I have argued for in this book and is testified to by most of the interviews we conducted. Second, I will contest the gain of a notion of subjects being special because they perform some kind of aesthetic perception. Venkatesh and Meamber (2008) are right in pointing out that certain meaning properties of objects may have emphatic relevance for consumers when having experiences that are, in their opinion, "affective in nature, reflective, and contemplative" (51). But the effect on subjects does not necessarily entail the design objects to be constituted as "special" due to a certain "artful" gaze on things.[12] In my phenomenological approach to the aesthetics of design, to perceive aesthetically is a common aspect of having an experiencing engagement with the world, which is, ultimately, to

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be in the world. Thus, I will argue against aesthetic perception as leading to a special mode of subjectivity that, in Venkatesh and Meamber's view, is related to art. What is open for analysis, though, is the aestheticizing effects of how objects are staged by various means to be appreciated aesthetically with sensual and conceptual meaning.

Next, what objects mean for people points to the social space of consumption practices. With my focus on the constituents of aesthetic perception, however, I will delimit my investigation from entering more specific analyses of social space.

I want to point out, nevertheless, that the dimension of the social is important to acknowledge and can be integrated in further studies. Consumers may respond to input in differentiated ways according to idiosyncratic or socially defined taste, position in society, and access to a variety of economic, cultural, and social resources. To illustrate, in *Distinction*, Pierre Bourdieu (1984) undertook a large investigation of taste cultures in France in the 1960s, subtitling his work "a social critique of the judgment of taste." As an implication, he not only contested Kant's philosophical concept of taste, connected to a general judgment of the beautiful and the sublime, but proposed to look at correlations of people's position in society and their taste preferences, often articulated in opposition to the taste of others.

Even if this kind of correlation may have become more fluid today, the social dynamics of taste preferences in relation to aesthetic perception are still relevant and virulent. Localized "taste communities" exist in many contexts, as studied, for instance, in relation to the consumption of kitchens (cf. Southerton 2001; see also Miller 1988). In this context, the claim can be made for the emergence of a "new middle class" in late-modern societies. In its search for the special in eating, living, traveling, body, and education, in a kind of "materially founded post-materialism," this new middle class has become dominant in the consumption of design as "cultural goods" (Reckwitz 2019, 303). In this account, the (globalized) lower-class poor and precarious do not have these opportunities. Seen through this sociological perspective, our interviewees do mostly belong to this new middle class, and if they are economically precarious, as a result of being students, their mindsets and career aspirations are clearly aimed at becoming part of the new middle class.

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Contextual Aspects

In the investigation, contextual aspects contribute to framing the aesthetic perception of respondents. They do this on two levels. First, they operate as aestheticizing factors, giving attention to what can be appreciated aesthetically or regarded as "aesthetic" (and, hence, delimiting the sphere of the "aesthetic"); second, they offer ways and modes of how to perceive something aesthetically. Two factors especially play key roles in the process of delimiting and framing aesthetic perception: media and taste norms. Typically, respondents acknowledge being affected by media and taste norms but seldomly provide reflections on how this operates. Of aestheticizing factors in play (cf. chapter 3), an institution such as the museum is not uttered to play a role.

Media First, media may affect aesthetic perception. Media relate closely to the category of "ontological transformation," which in my analysis in chapter 4 describes aesthetic experiences elicited by the ability of objects to be transformed (e.g., as image) and to enter new, mediated settings. Hereby, objects can be appreciated for qualities of being staged as and shown on images. For the respondents, however, this process runs in the opposite direction. In several instances, perception starts in the media, whereby mediated images contribute to how objects are appreciated. In this operation, media operate directly as a means of aestheticization, ascribing aesthetic value to objects.

In the interviews, we explicitly asked respondents about their opinion on the role of media on their perception. Most respondents value media positively and are, accordingly, open to the media's possible effects on perception and opinion. Further, the respondents elaborate eloquently about the role and effect of media, indicating a stronger discursive disposition about media than, again, sensual aspects of form and material. Instead of being subsumed to critical reflection, media are seen to be helpful in steering orientation and thus, I add, in framing aesthetic perception. An important effect of mediation is to create an interpretative setup for objects to be integrated in, and naturalized as a part of, the home. Respondent #3 (female, age 21) expresses this aspect in opposition to a difficult decodable ad: "This is exactly why I like [mediations of] homes, because that is the kind of situation where you would use it [the chair]." For respondent #11 (male, age 27), ads may even facilitate a sensorial depth. Through the ad, which displays a chair from several angles by a table, the chair "gets more

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three-dimensional. You can better get an overview of how it looks. And suddenly, I can also better tell that . . . there is upholstery on the seat . . . then I get a deeper impression of what kind of chair it is." When asked how a visual mediation of the Vegetal chair may affect her perception, respondent #6 (female, age 23) suggests that highlighting the color and material in contrast to a black-and-white background makes the chair radiate softness and warmth, and on this basis it appears more attractive.

Respondent #4 (female, age 25) expresses, however, a concern that objects may be overexposed and, in becoming "too much habit," lose personal relevance and symbolic magic. At the same time, she summarizes most of the respondents' positive evaluation of visual mediation:

> Actually, I think ads are pretty good. I also think that blogs in general and Instagram are interesting and good media because I think that when you see [a chair] in the ambience and the homely setting [hygge] that they offer in images, then you may picture to yourself that it would look nice in your home. Often, if you see a product in isolation, then you can have difficulties in imagining it. . . . So, the totality and advertising are crazily important, I believe.

The respondents point to digital, interactive media and especially Instagram. As a media primarily focused on visual representation since its launch in 2010, Instagram increasingly has become a carrier of lifestyle content.

The media type most referred to in the interviews is, though, interior design magazines, especially *Bo Bedre* (literally, "Live Better"),[13] the oldest Danish interior design magazine (since 1961) still in publication and with authoritative status (cf. Hadberg 2019). According to respondent #6 (female, age 23), "Bo Bedre is highly related to aesthetically attractive design, something that in interior decoration, when they make these magazines, should be pleasing to the eye. . . . Not everybody can, like, buy this. And there is an appeal to a certain lifestyle." Respondent #7 (female, age 28), who is fond of harmony in her home decoration, appreciates *Bo Bedre* for presenting objects in "exquisite settings." In this vein, respondent #4 (female, age 25) considers the magazine a medium that may "style" objects in ways "where it may affect you to find it, well, cozy." The magazine thus operates as a kind of discrete power, but nevertheless a power. By offering ways of presenting objects, the magazine contributes to framing perceptions and the appreciation of them.

"Danish design" as taste norm Next, an important factor for many of the respondents is what can be called the taste norm of Danish design. In a

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Danish context, this norm is not to be directly anchored in specific social spheres, even if it requires cultural and economic resources to buy into. Rather, it is a culturally produced, ideological construct that may have a historical origin (the heyday of Danish Modern in the 1950s) but mostly serves as a floating, visually dominated signifier of simplicity, minimalism, and affection toward certain designers. Especially, Danish interior design magazines contribute to this cultural construction (cf. Hadberg 2019). As Venkatesh and Meamber (2008, 64) point out, each claim of "individual patterns of taste" is based on a "cultural framework [which] may have a common element built into it," such as a shared "set of cultural values and meanings." Naturally, cultural frameworks may be more or less commonly shared, differ in scope and extension, and in resonance with the discussion above, be located in different social strata of society. In the study, most respondents are interested in design—for instance, as students (in design). This circumstance likely produces an overrepresentation of a common taste norm that, in the Danish context, is supported by media such as magazines and social media.

Anyhow, the taste norm of Danish design has steering effects for aesthetic perception. For several respondents, "Danish design" operates as a frame of reference regarded to be common in Danish society. To see something as Danish design confirms a register of "good taste" and acknowledges the objects for their qualities of form and function. Thus, the confirmation of this taste norm has the aestheticizing effect of not just appreciating sensual aspects of form and function but also becoming aware of them. A kind of meta-level of this taste norm is the brand of designers and companies affiliated with Danish design. As a means of aestheticizing consumer valuation (cf. Dagalp and Hartmann 2021), brands offer a sanctioned and authoritative point of entry into good taste, such as the designs of Georg Jensen or Piet Hein (cited by respondent #10, female, age 51). It is seen as something "classic" and durable, "usable for a long time" (respondent #4, female, age 25). At the same time, this taste norm makes a point of departure for claiming an individuality in style, for being different (respondent #11, male, age 27), perhaps in an "understated manner" that is not really breaking with the taste norm (respondent #16, male, age 21), and for enabling "moments of surprise" when the norm is not met in, for instance, an extravagant lamp (respondent #6, female, age 23).

Most remarkably, though, is the connection made by many respondents between what is perceived as a common norm and, on this basis, a claim for

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uniqueness. In the interviews, Danish design functions as the mainstream, ensuring good taste in making the right choices while providing possibilities for being special. In this respect, respondents are not only part of a mainstream of being or wanting to be unique (we are all *unique*/we are *all* unique) as represented by respondent #15 (female, age 25): "I like things not everybody has. . . . It is a conscious choice that I want it more personal." Many respondents do also employ a mainstream perception of Danish design as a backdrop for self-expression and specialness. For respondent #10 (female, age 51), brands in Danish design are a signal of something special or of special status; at the same time, as part of the established taste norm, these brands are part of and confirm the mainstream.

The taste norm of Danish design (in brands, companies, and designers) produces an authorizing aestheticization that for many respondents is intertwined with the objects they cherish. Conversely, they find it hard to perceive the objects isolated from the normative set of values affiliated with the taste norm, even if these values often are not directly pinpointed by respondents but merely represent a safe choice. The basic point is that aesthetic perception—that is, perception of the objects valuing sensual and conceptual qualities—is always supported, framed, or even conditioned by external, contextual factors such as taste norms and media.

Constructing Aesthetic Perception

As stated, what constitutes aesthetic perception relates to the aesthetic relationship: *What* is being perceived (e.g., a certain class of "artful" or mundane objects)? And *how* are being objects perceived (i.e., are they "seen" in certain ways)? The above analysis of structural traits of aesthetic perception indicates that *objects* are being appreciated for visual and tactile qualities (and not for belonging to a certain class of objects being more or less "aesthetic"); that *subjective* evaluation plays a key role in what is being valued (e.g., objects with a history); and that a series of contextual factors contribute to framing what is worth appreciating.

In this instance, aesthetic perception is culturally produced as part of the process of aestheticization, where design is made or conceived of as aesthetic by factors external to the objects themselves (cf. chapter 3) and where aesthetic categories "filter" what is perceived as "aesthetic" (cf. chapter 4). In brief, what conditions design (e.g., media and institutions) also conditions

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the perception of design. Aesthetic perception is thus culturally produced as a way of highlighting specific sensual and conceptual qualities.

In this section, I examine how aesthetic perception of design is culturally produced and constructed as modes of perceiving design. Several factors contribute to objects being perceived aesthetically in a "consumer cultural aestheticization process" of a "recursive relation of consumer, brand, and market processes" (Dagalp and Hartmann 2021, 2–3), but to specify the investigation, I am going to center on how aesthetic perception of design is being constituted as a paradoxical focus on *the special bound to the ordinary*. More specifically, I pose the question of how aestheticization produces a perception of specialness in design that does not elevate design beyond itself (e.g., to be "art") but remains attached to the ordinariness and everydayness of design.

I begin by contesting the concept of the "special" in relation to design. In this regard, my claim is that the focus on the special is a trait of late-modern societies and that it has special expression in design as tied to the ordinary. Based on this, I will analyze and discuss two paradigmatic means of aestheticizing perception: first, the staging of objects in *physical space*, with my focus on how the special and the ordinary co-contribute in the construction of a mode of aesthetic perception in the 2017 exhibition *Everyday Life—Signs of Awareness*; and second, the circulation of objects in *media*, where I focus on the specifics of digital media.

Ordinary and Special

In the interviews, we asked for what respondents appreciate in mundane objects and how they do so—but without using the blocking concept of "aesthetics" with its connotations of art and high culture. In this way, we placed the interview setting in everyday life (to be specific, in respondents' homes) and encouraged respondents to point out what stood out for them within this setting. Hereby, we have paradoxically asked for the special of the ordinary and (gently) forced respondents to articulate about something that they normally may not be speak about.

Aesthetic discourse The question of how aesthetics deals with specialness and ordinariness resonates with a polarity within aesthetic discourse. On the one hand, the premise of aesthetic as a general theory of sensory appeal implies aesthetic aspects to be embedded in all kinds of everyday settings, as noted in phenomenological aesthetics (e.g., Böhme 2013) and the

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focus on the "familiar" in "everyday aesthetics" (Saito 2017). In this instance, aesthetics is an important part of a general phenomenological theory of experience. On the other hand, a tenet in aesthetic theory is that aesthetic perception has to do with perceiving something as special, whether through a high awareness of the "*play of appearances*" (Seel 2007, 13, his italics), a focus on sensual perception in itself in an "auto-referential character of perception" (Reckwitz 2015, 26), or an arrangement of reality in a manner that leads to a "more attentive and mindful living" (Saito 2017, 4), to draw on references already mentioned in this book and all taking aesthetics beyond the designated and delimited sphere of art.

The point is, however, that both ends of the polarity matter for design. The aesthetics of design affect how design in general appeals to experiencing and, at the same time, how design objects may do so in special ways or be perceived to do so. In the study by Venkatesh and Meamber (2008), aesthetics designates an artlike feature of objects to be (or being) integrated in everyday life. In our study, in contrast, the embeddedness of the special in the ordinary and, conversely, the ordinary in the special is expressed through a process of valorization that is not related to artlike qualities but the ability of objects to stand out in one way or another. On this basis, an important question is what makes something special (or perceived as special) when we, on a fundamental level, deal with mundane everyday objects.

Late-modern specialness A sociological approach to this question is proposed by the German sociologist Andreas Reckwitz. In *Die Gesellschaft der Singularitäten*, Reckwitz (2019) claims Western, late-modern societies to privilege the outstanding and special, *das Besondere*. Whereas the modern era from 1945 to 1975 (*Les trente glorieuses*) had its focus on generality, *das Allgemeine*, in mass production, mass products, and mass consumption of basic products founding welfare, late-modern societies privilege the uniqueness of individuals, creative work, and specialized goods open for valorization.[14] Hence, Reckwitz offers a comprehensive theory of the singular, encompassing economics, social structures, work spheres, digital media, consumption, and politics. In this context, I want to focus on the singularization of goods, the process of making objects special. My focus is to discuss if and how singularization may operate as a widespread societal condition framing aesthetic perception.

Reckwitz's basic point is that societal valorization of goods turns around from having a focus on mass (in manufacture, generality of products, and

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consumption) to cultural profiles of singularity. In traveling, living, eating, and choosing schools and goods, people in late-modern Western societies prefer the outstanding and special, so Reckwitz claims. In processes of valorization, goods are being "culturalized," conceived as "cultural goods" (Reckwitz 2019,16), and ascribed cultural value by consumers: "In the context of the social logic of singularization, what is being qualified is that which counts as *special* and *therefore* as 'culturally valuable'" (80, his italics). Integrated in the market, a "sphere of culture [Kultursphäre]" exists "in which social processes of valorization and affecting take place" (77). In a circular formulation, Reckwitz points to the self-confirming effect of valuation:

> What appears as valuable and special has the effect of being affective *because* it is valuable and special. And what to a high degree affects, appears valuable and special *because* it affects to such a high degree. (Reckwitz 2019, 83, his italics)

The ascription of value depends on a self-supportive system where the valuable affects and what affects appears valuable. Value is fluid and fundamentally cultural (or, as discussed, symbolic) as it is more or less being arbitrarily ascribed to goods. Of course, taste authorities such as magazines and opinion leaders may take in privileged positions of ascribing cultural value to goods (and the opposite, de-ascribing value), but Reckwitz's point is that prevalent culturalization in "hyper-culture," where everything can be "valued as culture" (Reckwitz 2019, 108), is a structural condition of the market in late-modern societies. What takes place is a "wide-spreading institutionalization of markets of attention and valorization which gather around singular goods" (154). In contrast to Igor Kopytoff's (1986) classic anthropological thesis that things are being homogenized in markets while being singularized in individual ownership, Reckwitz's claim is that singularization is now a condition of the market, creating unique profiles for goods.

In this market condition, all objects can be turned into "practices of culture" (Reckwitz 2019, 308) whereby they are attributed value beyond the functional use and are expected to have such value. In his analysis, "design" is an attribute of "cultural goods":

> Cultural goods often have a thing-like character, for instance in the expanding fields of fashion, interior design, and entertainment electronics. Here, the tool paradigm of the thing-world is being extruded by a fetish or cult paradigm. Thus, the *design* of things, which beside the shaping of a pleasant surface covers the construction of the whole thing, becomes central. (Reckwitz 2019, 124, his italics)

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On the one hand, Reckwitz only confirms what we have known since the advent of consumer culture. When objects, to rephrase Sidney Levy (1959), are not just valued for what they can do but also for what they mean, they are designed not just to be functional tools but to meet requests for meaning, which in Reckwitz's formulation is exaggerated to be an extreme investment of meaning in objects as cult and fetish. In the field of design studies, thus, it is a well-established tenet that objects always (also) are cultural and symbolic. On the other hand, more specifically, Reckwitz (2019) points out how objects may contain "Singularitätskapital" (169), a capital form (resonating Bourdieu) of singularity, built on evoking attention and creating reputation through, for instance, a continuous repetition of brands and designer names and on positioning the objects as original, rare, and authentic—for instance, in praising modernist furniture from the 1950s as "classics."[15]

Constructing aestheticized perception My point in highlighting Reckwitz's sociological theory of Western, late-modern societies is to introduce a societal level of aesthetic perception in relation to consumption. Just like aesthetic categories vary historically (cf. chapter 4), parameters of aesthetic perception are not given once and for all but depend on societal conditions. To follow his argument, the omnipresent logics of singularization not only affect how objects (and other cultural matter) are conceived and designed but also how they are supposed to be perceived and valued as cultural artifacts. Reckwitz (2019) even indicates that *singularization calls for aestheticized perceptions* when he claims that what matters in "contexts of cultural practice" related to singularization is not "neutral perception focused on information" but "intensive perception for its own sake in its all sensual dimensions," which is to say, its "aesthetic perception [ästhetische Wahrnehmung]" (89). In the society of singularity, to sum up Reckwitz's position, the special and unique get in the foreground, regarding objects and the perception of them.

As a background for the interviews, Reckwitz's theory offers a sociological explanation for why respondents privilege the singular and outstanding goods as a cultural value. In the interviews, objects designed to elicit aesthetic perception of the objects as "special" or "outstanding" are present, as well as the perception producing specialness based on more "ordinary" objects—for instance, in the attribution of personal, symbolic values. Naturally, we encouraged respondents to talk specifically about objects that had special

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value for them. The question is, nevertheless, what "singularization" means in this context. Thus, what is it for objects to stand out as special within a context of objects intended for everyday life? Reckwitz (2019) acknowledges the paradox of building singularity based on mass production and "standardization of objects" (129) but returns to the uniqueness of *art* as the "structural model" (127) of singularity as such. With this argument, Reckwitz traces the historical roots of singularity as a mode of cultural production and follows its transformation into its present-day articulations.[16]

Even so, I will problematize the singularity of design to be based on the model of art. Aspects of design objects may, however, be artlike in the sense of being unique (e.g., in the sculptural form of a citrus squeezer or a lamp), and in its history, design has had its affiliation with art (e.g., the Bauhaus movement). But just like contemporary design has loosened, even abandoned, its relationship with art, its concept of aesthetics has gained its own structure (hence the argument of this book). As part of this shift, aesthetic perception of design has thus become dependent on the specifics of design and not art. As stated, our interviews indicate that respondents only to a minor degree perceive the specialness of design through the prism of art. What is at stake, instead, is an *ongoing negotiation of what is perceived as special and what is considered as ordinary*, in a way which, to a large degree, is fluctuating and dependent on contextual factors such as taste norms and media, as discussed above.

Concededly, Reckwitz (2019) also discusses how outstanding features are being negotiated by means of qualification in creating attention and reputation and of quantification through comparisons, rankings, and competitions.[17] My point is, then, *pro* Reckwitz's sociological framework: that singularity is central for aesthetic perception and is being constructed in various ways. But it is also *contra* Reckwitz: that the attribution of specialness in design is not based on the uniqueness of art as a founding model but, paradoxically, on the ordinary made or being seen as special without losing its constitution as ordinary qua design.

What is interesting in my analytical focus, thus, is not how aesthetic perception of design replicates the perception of art where design is seen in the like manner of art or "as art," as implied in the concept of aesthetics proposed by the Danish philosopher Søren Kjørup (2000), but how the ordinary is being made to stand out to be perceived as special but still be

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attached to the ordinary. For this purpose, I will investigate strategies of constructing aesthetic perception.

Exhibiting the Everyday

The exhibition *Everyday Life—Signs of Awareness* is an example how settings may not only place design in the world but also propose ways of perceiving and understanding it. I have chosen an exhibition as case material not just because museums, almost per se, operate as institutions aestheticizing perception by decontextualizing the exhibited items (cf. chapter 3), but even more because this exhibition displays paradigmatic means of aestheticizing design by having a special "awareness" of "everyday life." The analysis of this mechanism can, beyond the scope of this book, be expanded to similar spaces in commercial domains, such as retail and brand spaces, where special flagship stores for brands epitomize a focus on making the everyday special.

The exhibition was displayed from August 5 to November 5, 2017, at the 21st Century Museum of Contemporary Art in Kanazawa, Japan, and organized to celebrate 150 years of diplomatic relations between Japan and Denmark. Its main curator was the Danish designer Cecilie Manz[18] in collaboration with Hiromi Kurosawa, chief curator from the museum in Kanazawa. Across 800 square meters of exhibition space, 130 pieces of Danish design from 70 designers were displayed along with Japanese design. I will concentrate on sections in the exhibition displaying Danish design. I did not attend the exhibition in Japan and here work with material from open sources.[19]

As a medium for staging design, *Everyday Life* combines two different kinds of design exhibitions. The first is the exhibition as a way of displaying design in a *museum* (whether designated as art or design), which is a phenomenon dating back to the late nineteenth century (Michaëlis 2016). The second is the *promotional exhibition*, where a series of actors, often in a public-private collaboration, employ the exhibition as a platform for showing the best of a country's or a region's design. This kind of exhibition can be displayed in a museum but also in other venues such as commercial display rooms. *Everyday Life* is a promotional exhibition displayed in an art museum.

Constructing "Danish design" Having the purpose of a promotional exhibition, *Everyday Life* attaches its mode of staging and, indirectly, perceiving design to an ideological construct of "Danish design." A predecessor in this

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endeavor was the exhibition *Design in Scandinavia*, which traveled across the US from 1954 to 1957 and was organized by the Danish Arts and Crafts Association and its Scandinavian sister organizations (cf. Hansen 2006; Guldberg 2011). At this exhibition, large pictures of Nordic landscapes suggested a more or less direct line from the place of origin (often set in nature) and materials and forms of the exhibited pieces.

On this ground, in the words of design historian Jørn Guldberg (2011), this exhibition laid the foundation for a discourse of "Scandinavian Design," or rather "two different discourses . . . a commercial one in which 'Scandinavian Design' stands for a general brand, and a design cultural one" relating to topics of endurance, coherence, and harmony underlying the "Scandinavian product culture, its ethics and aesthetics" (58, 56). Hence, the audience was encouraged to perceive these values at the exhibition. Later examples are the travel exhibitions made by the Danish Design Centre, such as the exhibition based on the book *Problemet kommer først* (*The Problem Comes First*) (Bernsen 1982), which encouraged Danish design to be perceived as inventive, based on logical simplicity and a superb sense of materials. Since 2000, activities in promoting Danish design have been organized by actors referring to the Danish Ministry of Culture,[20] and *Everyday Life* is no exception.

Aestheticizing the everyday The conceptual and ideological entrance to the exhibition was the concept of the *everyday*. In the exhibition catalog, Cecilie Manz (2018) claims a focus on sensory details and the importance of the "right materiality" in Danish design, which contributes to giving "shape to and defining our everyday life" (40). Taking the ordinary as a starting point, the main strategy at the exhibition was to aestheticize the material objects of everyday life and hereby offer a new staging and perception of them—that is, to make the ordinary stand out.

The exhibition employs various strategies to display and aestheticize the sensual materiality of everyday life and to encourage modes of perceiving the objects. First, unsurprisingly, it decontextualizes its objects in what appears to be a white cube setting of design modernism (and many design museums). Through the decontextualizing white cube setting, the attention is directed away from situations of practical use and toward formal and material qualities of the objects, not only as singular objects but also as constellations of objects that cast light on each other and—so to speak—co-construct the abstract formal meaning potential of each other. The strategy

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of decontextualization is often taken beyond design exhibitions into commercial settings in retail spaces and advertising: As viewers, we should not see the exhibited objects as objects of use and as part of a more or less muddled everyday filled with stuff but as special objects worthy of a dedicated, special, and even, in a Kantian sense, disinterested interest through the optics of the institution of the art museum. Exceptions do exist (cf. Michaëlis 2016) but at the *Everyday Life* exhibition, the dominant strategy is to employ the clean and clear lines of the white cube setting and, in this manner, highlight or uplift the exhibited objects as special.

To exemplify, the white cube effect is at play in the "Materiality Room." Here, ordinary objects are made special by modes of displaying them. A central part is a podium split in four parts, each with a theme (figure 7.3, background). Two of the themes are "Almost nothing" (figure 7.4) and "Functionality" (figure 7.5). In these two installations, objects are assembled to relate to each other. In the first case, an aesthetic minimalism is at play through a minimal use of materials and dominant focus on geometrical forms. In reducing the objects to basic forms in various material

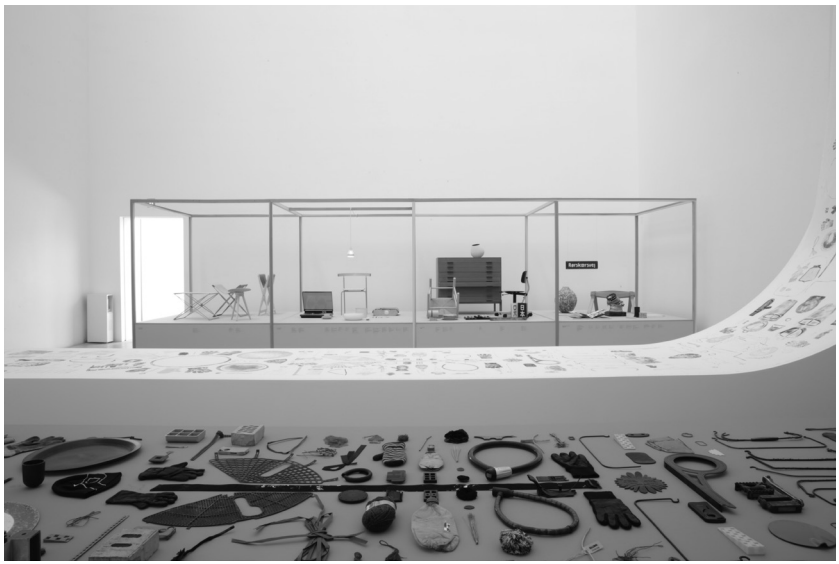

Figure 7.3
View in the "Materiality Room." *Everyday Life—Signs of Awareness*, 2017. Exhibition organized by 21st Century Museum of Contemporary Art, Kanazawa. Photo credit: Cecilie Manz Studio.

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Figure 7.4
"Almost nothing" installation in the Materiality Room at the *Everyday Life—Signs of Awareness* exhibition. Photo credit: Cecilie Manz Studio.

incarnations, the installation may elicit an appreciation related to the aesthetic category of "formal simplicity" (cf. above and chapter 4). Further, the installation to a high degree affirms the white cube setting; in their minimalism, the objects are on the verge of being absorbed in this setting to make them virtually disappear. In the second installation, a stronger material presence is the element tying the objects together. In comparison with the first installation, material abundance is clearly at play, but the white cube setting also seems to let these objects and materials appear lighter than they are. The objects in this installation may have "heavier" sensual aesthetics, but the aestheticizing strategy of the exhibition design lets them obtain a "lighter" expression and, hence, encourages an aesthetic perception of, yet again, formal simplicity.

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Figure 7.5
"Functionality" installation in the Materiality Room at the *Everyday Life—Signs of Awareness* exhibition. Photo credit: Cecilie Manz Studio.

At another promotional exhibition, also inaugurated by the Danish Ministry of Culture, *Dansk Form* in Hamburg in 2000, a different, more conceptual strategy of combining objects could be seen. Here, industrial design artifacts and craft objects were paired according to form: a hearing device and a piece of jewelry, a vacuum cleaner and a heavy ceramic object, or a thermostat and a citrus squeezer (figure 7.6; cf. Folkmann 2000). In the "dialogue" between the two kinds of objects, the aesthetic reflection has more emphasis on the relationship of the two objects (similarities of form) than on the context of the exhibition setting. The juxtaposition of objects different in function but similar in form may touch on the sensual impact of materials, but it evokes a conceptual reflection as well of conventions of form and what design is about.

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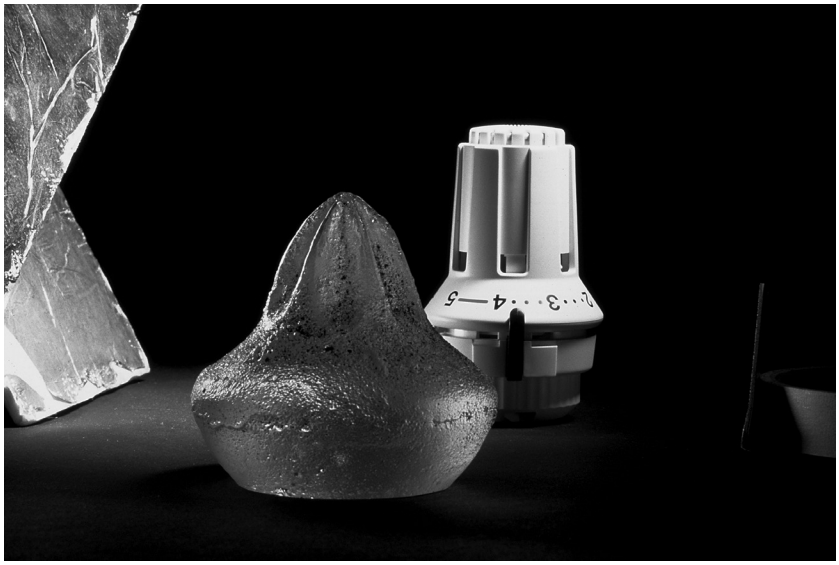

Figure 7.6
Citrus squeezer, 1999. Design by Helle Helsinghoff. Thermostat; design by Kontrapunkt and Danfoss. Photo credit: Ole Akhøj.

In the "Home" section at *Everyday Life*, the aestheticizing effect of the white cube setting is brought into dialogue with the ordinariness of everyday life. In the display of a home setting with a kitchen and dining table (figure 7.7), abstracting organizing principles are at play in the use of large shelves and in the arranged staging of everyday situations that never break the illusion of being arranged for an exhibition (even if traces of everyday practices are present such as the open recipe book on the kitchen counter or, hard to detect in the background, the slightly disorganized dining table). The aim is to let everyday life and its objects aesthetically saturate each other. The audience should learn that the aestheticized objects at the exhibition are also objects representative of everyday life in Denmark and vice versa. The exhibition displays to its audience that everyday objects do indeed have aesthetic features of form, material, texture, color, and abstract graphic forms (as in the use of black, a smidgen of yellow, and dominant white at the dining table) and, accordingly, can be appreciated as such through relevant aesthetic categories.

That a strategy of the exhibition is to let the audience perceive everyday life in a new, aestheticizing light is epitomized at the entrance to the

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Figure 7.7
"Home" curated by Cecilie Manz and Kenya Hara. Installation view of *Everyday Life—Signs of Awareness*, 2017. Exhibition organized by 21st Century Museum of Contemporary Art, Kanazawa. Photo credit: Cecilie Manz Studio.

Materiality Room, where a door is taken off its frame and set in isolation on the floor (figure 7.8). Here, the intention is that the audience should not just pass through the door opening without noticing the door but see and notice the door (its texture and weight) and, especially, the door handle designed by the famous designer Arne Jacobsen. The door handle is, then, not only something that we grasp without noticing it in order to open a door but also something we are encouraged to perceive as having a special aesthetic presence, as "a momentary and simultaneous abundance of appearance," to recall Seel, through form and material. In this, the subtitle of the exhibition, *Signs of Awareness*, suggests a conceptual awareness and conscious engagement with the sensual qualities of design.

The specialness of the ordinary In most installations, purchasable objects for the home are displayed and aestheticized to be special through staging and highlighting their ordinariness. In contrast, the installation *Street Print* displays an array of materials and objects as found objects of everyday life, parts of objects, or even garbage found in the street (figure 7.9). On this

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Figure 7.8
Entrance to the "Home" section at *Everyday Life—Signs of Awareness*, 2017. Exhibition organized by 21st Century Museum of Contemporary Art, Kanazawa. Photo credit: Cecilie Manz Studio.

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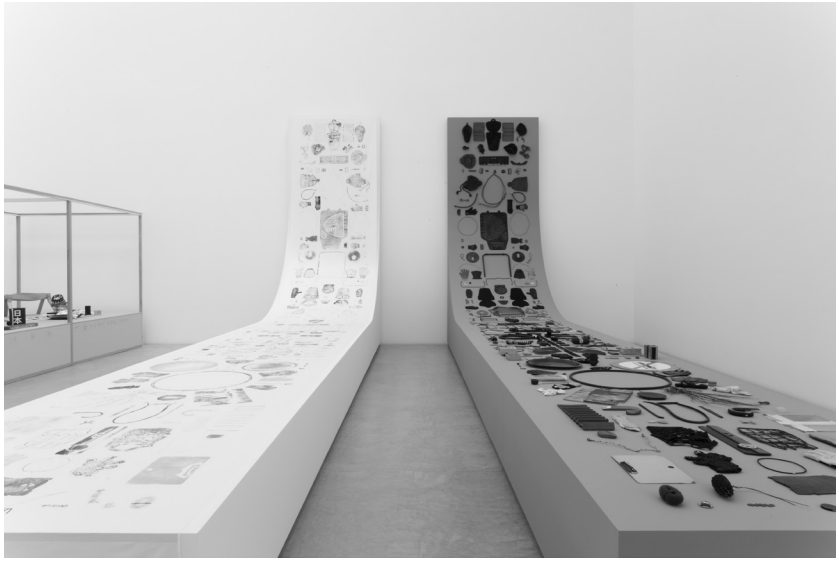

Figure 7.9
Street Print, 2013. Design by Anne Fabricius Møller. Installation view of *Everyday Life—Signs of Awareness*, 2017, organized by 21st Century Museum of Contemporary Art, Kanazawa. Photo credit: Cecilie Manz Studio.

basis, textile designer Anne Fabricius Møller has made a textile reproduction of the forms and patterns of the objects, which are heterogeneous in form, material, and expression, if not in size. Møller's selection principle is close to random, and her selection of found objects testifies to an anthropological or even archaeological approach to the material culture of Denmark. Many of the objects are dark (and dirty) and far from the norm of aesthetic minimalism. In Møller's textile design, objects are subsequently aestheticized by being organized and losing materiality, whereby they obtain a new status as an abstract pattern in the textile reproduction. The heterogeneity gets homogenized and, in doing so, the objects lose their importance and weight as material objects and are made into the signifying structure of a visual pattern.

In this process, the ordinariness of found objects, which at the same time are unique as objects with signs of use, are transformed into a new kind of uniqueness, which is the specialness of the designed structure. Hence, the installation not only encourages visitors to perceive objects according to this process of aestheticization, where visuality dominates over materiality

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(which also can be seen in much visual mediation of design), but they are also being shown how such an aestheticization of objects and, accordingly, of perception is being constructed. Possibly the most artlike contribution at the exhibition, the installation displays aestheticization as a process of transforming the ontology and "specialness" of the material and makes it into a conceptual statement.

In general, then, the strategy at the exhibition is to let the audience perceive the design of everyday life in an aesthetic perception with focus on the specialness of form, material, and texture. In this operation, the exhibition aestheticizes design objects of everyday life by making them lighter, homogeneous, and abstract. The everyday life represented at the exhibition is not filled with muddy stuff but with an airy sense of lightness and focus on form. The installation *Street Print* also performs an act of aestheticization but makes this act a part of the design by integrating the aestheticized versions of the objects found in the textile. By openly displaying its method, this installation offers a critical reflection of how print as a design medium can represent the materiality of everyday life. In this interpretation, the aestheticizing principle stems from the reflective capability of the installation and its transformative principle of form rather than from the exhibition setting.

In sum, the aim of the exhibition is to encourage a more aware perception of the special qualities of ordinary everyday objects. On the one hand, the exhibition operates quite traditionally in staging objects in decontextualizing settings, which may suggest new views on the objects, but the staging also is employed to confirm an ideology of Danish design as simple, form-oriented, user-oriented, superbly executed in quality materials and oriented toward everyday life. In part, the *Everyday Life* exhibition consists of a display of Danish design along with Japanese design, suggesting a kinship building on values of minimalism and carefulness of form. Still, the exhibition proposes that a special feature of Danish design is a reflective interaction with everyday life through design and, next, that this process is led by an aesthetic perception of the design as standing out as special with attention to the means of engaging with the ordinariness of everyday life.

On the other hand, however, the open display of means of aestheticization encourages a critical reflection that not only lets the objects be imbued with an abstract ideology of being "democratic" or related to "welfare" but also lets them be concrete prisms for an experience of how everyday life can *feel special when having an attentive focus on the sensual means of form and*

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material. Hereby, the exhibition partakes in constructing an aesthetic perception of Danish design as special by encouraging viewers to be more attentive to and "aware" of the sensual texture of ordinary objects. As the perceiving audience, we should learn to appreciate the meaning of the objects as something that is entangled with the materiality of the objects and not exceeding the objects themselves as an ideological superstructure.

A Hall of Mirrors of Aesthetic Perception

In terms of design mediation—that is, means and devices for mediating the meaning of design among designers, manufacturers, and consumers (cf. Lees-Maffei 2009)—design exhibitions represent a one-way communication where actors with authority (museums, curators, ministries, etc.) aim to convey a specific message to an audience. This structural mode of communication is shared by traditional media, such as radio, TV, advertising, books, and magazines.

Importantly, media not only (aim to) convey content but also frame how this content should be perceived. In the 1960s, Marshall McLuhan famously coined the dictum "the medium is the message," pointing out that the way media convey content is in fact (a part of) their content. Seen as modes of organizing sensual perception, media may even "change the objects of perception for us" (Schweppenhäuser 2016, 103). This is evident in the interviews, where several respondents mentioned the magazine *Bo Bedre* as a facilitator of the "right taste" and, hence, of ways of perceiving the objects.

As already noted by Walter Benjamin (1991) in the 1930s, media plays an increasing role in creating and circulating meaning content as aesthetic. Visual media are omnipresent in forms like ads, posters, Internet platforms, social media, and computer games (Sturken and Cartwright 2009), and more people experience the art of Monet or a chair by Verner Panton through visual media than in a close encounter or physical interaction with the actual objects. Objects and appearances to be aesthetically perceived are not just "there"; they are staged and reflected in media, where they are culturally produced as objects for specific experiences. Through images of, say, the *Panton chair* (designed in 1967 and often on the cover of design books), the viewer is steered toward focusing on the formal and visual qualities of the chair.

In the interviews, we conducted an experiment in which we showed respondents various visual mediations of chairs from ads and interior design magazines and asked how the mediation affected their perception

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of the mediated chair (cf. Folkmann and Hansen 2016). Mediations with an effect of surprise evoked a response; nevertheless, most dominant in our findings was that mediations that put chairs in a homelike setting were positively valued by most of our interviewees (nine respondents). In this manner, respondent #3 (female, age 21) states: "This is exactly why I like [mediations] of homes, because that is the kind of situation where you would use [the chair]." And respondent #11 (male, age 27): "If we look at this chair that I started out describing as being a bit too spacey, I think it becomes normalized in the advertisement because it is featured in a natural context for the chair." In these instances, mediations help to "de-alienate" and focus the perception of the chair by "interpreting" it in a context.

Building on these insights, *digital media* offer new conditions in the mediated sphere of aesthetic perception in design. Constitutive elements of digital media, such as omnipresence, accessibility, speed, maximization of data storage capacity, and minimization of devices (e.g., smartphones; cf. chapter 6), are important for the framing of aesthetic perception in digital media, but most importantly, digital media offers a *reciprocity in communication*. In a two-way structure of communication, digital media also allows users to produce content. In challenging the authority and linearity of traditional media, digital media engages users as active producers of meaning. As a result, a hall of mirrors of content and perception is being created where contributions from manufacturers and users reflect each other.

In this context, I want to focus on the social network Instagram as a digital media providing new structural conditions for framing and constructing aesthetic perception. Since its launch in 2010, Instagram has first and foremost been a media for circulating images, but today it also facilitates messaging, videos, and time-limited posts called "stories." In addition to facilitating a stream of images, the Instagram app provides tools to filter and edit images. I will present and discuss Instagram in three steps: as a social media platform, as a tool that for facilitating the sharing of images, and in the example of construction of aesthetic perception in relation to the German cola brand fritz-kola.

Social media setting As a social media platform, Instagram offers a structure for articulating and circulating meaning with a focus on cultural value. As stated by media theorists José van Dijck and Thomas Poell (2013), social media networks operate according to a set of "technological, economical and socio-cultural mechanisms" that they describe as a specific "social media

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logic" of programmability of user content, popularity as a guiding social principle, connectivity as a social as well as algorithmically guided dynamics, and datafication in quantifying all of this (5–11). The personal profile serves as an anchor for the function of identity profiling and construction through status updates, linking, liking posts, and following other users, and the principles of social connectivity provide boundaries for the dissemination of meaning. On Instagram, you can choose not to let everybody see images of your beloved cats (it could also be lamps or garden gnomes) but only those defined as your friends.

Digital media operate through a decentered, widespread dissemination of social communication and networks of "deterritorialized communitarization" where users may define their own "translocal horizons of meaning," even without a definite geographical location (Hepp 2013, 104–105). Social media such as Instagram, along with Facebook, Snapchat, and TikTok are important platforms and vehicles for the creation of such networks, which in exceeding two-dimensional communication turns into multidimensionality and may even be said to have "changed the conditions and rules of social interaction" (Dijck and Poell 2013, 2). These media do, however, set very definite frames for the formation of these networks. Critically, thus, the flip side of the circulation of meaning within social media platforms is a certain closeness and self-circularity in the same way that information in digital media increasingly cannot be seen as "representations of an external world" but as a "self-reflective, closed world" of self-circulated information (Stalder 2016, 186).[21] Most notably, this can be seen in the echo chambers steered by algorithms, where users are suggested content or contacts without any surprises.

Images As a medium for displaying and sharing images and short videos, Instagram facilitates what can be seen and is worth attention. By distributing images, Instagram contributes to the "distribution of the sensible," which Jacques Rancière (2004; cf. chapter 3) talks about as central to aesthetics as well as to framing modes of seeing. On this point, a double logic of centrifugal and centripetal forces seems to be at play.

On the one hand, all kinds of images can be displayed and shared through Instagram, although with different degrees of popularity. Through the hashtag, the user can attach keywords to the image, which relate it to other images with the same hashtag and let users trace and follow specific content. In this way, the hashtag #vifacopenhagen enables a connection to

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all different kinds of images where people (and the company Vifa) relate to the product Copenhagen 2.0 (figure 7.10) in different ways. The hashtag "opens" the medium and makes it possible to communicate to users across geographies in the creation of hashtag-specific communities.

On the other hand, images on Instagram may designate a self-circularity where images reflect and confirm each other. In combining manipulated images and content often related to lifestyle and identity positioning, media researcher Lev Manovich (2017) has claimed that "Instagramism" is a style of images. In Manovich's view, the creation and circulation of images according to the style and cultural code of Instagramism demonstrates the user's belonging to the "global design class," defined by knowing "about subtle differences, the power of empty space, visual intelligence, and visual pleasure," as can be seen, for instance, in the magazine *Kinfolk* (95) or, taking the example above, in the repetitive similarity of the images of Copenhagen 2.0. In this way, the simulation of the images in Instagram

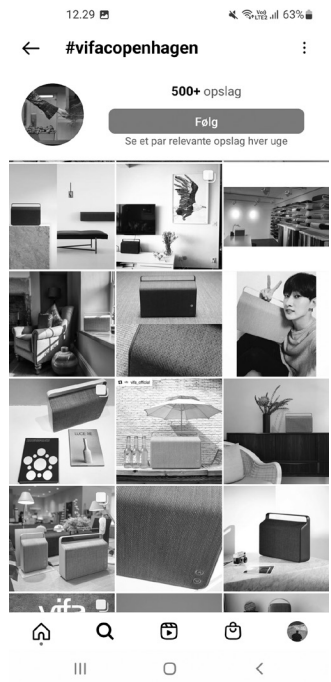

Figure 7.10
Instagram #vifacopenhagen. Accessed November 17, 2022.

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is two-sided. While having a starting point in reality, the images also have the effect of creating their own kind of nonreal ontology with new and open possibilities of representation.

In a lucid analysis, fashion researchers Karen de Perthuis and Rosie Findlay (2019) have pointed to characteristics and paradoxicalities in the visual imagery created by influencers on Instagram. As a new kind of cultural intermediaries "between fashion producers and their target market," influencers are producers and consumers at the same time. Influencers often claim to be everyday amateurs while taking part in a professionalized circuit of marketing whereby they "use their profiles to aestheticize and monetize their lifestyle" (225). What comes into being is a self-enclosed world of images that "often remediates the rhetoric and ideology of mainstream fashion photography rather than revolutionizing it" (221), creating effects of repetition and recognition, which, in turn, construct what fashion looks like. But it also creates the influencer herself as a simulated image, whose claim about living an everyday life is negated by being a "figure who exists, it seems, solely in the image" (221). Instead, the circulation of images produces "truth effects" exerting power (235), focusing attention, and framing perception. In a process of ontological transformation (cf. chapter 4), object meaning turns into image, and the image gains meaning as construction of perception. *This* is worth seeing, and this is *how* it should be seen.

My basic point is that a medium such as Instagram, which can contain more or less autonomous image worlds, operates as a means of aestheticizing perception; that is, it allows perception to be focused on, mediatized, polished, and even idealized as representations of the "real" world. In some of the closed image worlds of, for instance, *Kinfolk* (Manovich's example), Copenhagen 2.0, or fashion influencers, the images contribute toward making objects stand out as worthy of attention while also removing them from everyday contexts. In the end, the effect may involuntarily not be specialness of objects but a *sameness of images*. While the *Everyday Life* exhibition contains a postulate about experiencing the specialness of everyday life through perceiving the objects it exhibits, the perception of specialness through images risks resulting in a "flat" ordinariness of sameness. At the same time, closed image worlds challenge the multidimensionality of communication if the contributed images vary little; that is, if users merely reproduce images of influencers, who in turn just reproduce images of manufacturers.

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Branded image-world The German soft drink company fritz-kola is a case that illustrates how social media contributes toward aestheticizing perception.[22] The company works with a highly profiled brand style that defines the cultural setting and perception of its products as tinted with subcultural vibe and a dark universe of desire. The company employs aesthetic means in its highly reflective ads and campaigns, and the sensual-tactile appeal of the material and graphic design, which beyond references to modernist minimalism such as the Bauhaus-inspired typeface employing only minuscules (cf. Wiegert 2013), creates a product setting in images stressing the black color as a canvas for desire, partying, and innovation. As with much modern advertising, the marketing strategy operates through creating a high degree of simulation: a sense of a reality created by images and, in its extreme, "a generation by models of a reality without origin or reality" (Baudrillard 2009, 166).

In its visual language, actively proposing cultural value, fritz-kola establishes ways of perceiving the products. In its production of a highly coded "style," fritz-kola not only lets style be a property of the object in question; style also contributes to framing the perception of the object. In recalling Sianne Ngai (2012; cf. chapter 4), styles may affect "our perception of them as stylistic qualities" as ways of "perceiving an object" (29). In effect, fritz-kola aestheticizes not only by producing reflective simulation but also by engaging in the production of aesthetic categories that frame and stage the perception of its meaning, such as the interesting or zany. Hereby, the company obviously aims to create special profiles for its products—to posit their cultural value as outstanding. At the same time, the encapsulating "universe" of the brand has the effect of naturalizing subversive darkness, making it the new normal.

On this basis, fritz-kola has created its own image-world that is prolonged into social media such as Facebook and Instagram. Here, consumers stage the aesthetic setting of the company in a double perspective. On the one hand, consumers are active producers of design mediations and engage in a process of creative *prosumption*, as on Instagram, they productively coarticulate the meaning of the brand by producing their own image tableaux (figure 7.11). On the other hand, the company defines and controls the frame for this process. Through its aestheticization of "style," fritz-kola sets the rules for how consumers should contribute in the right way. Thus, the company engages consumers in aesthetic perception to some extent,

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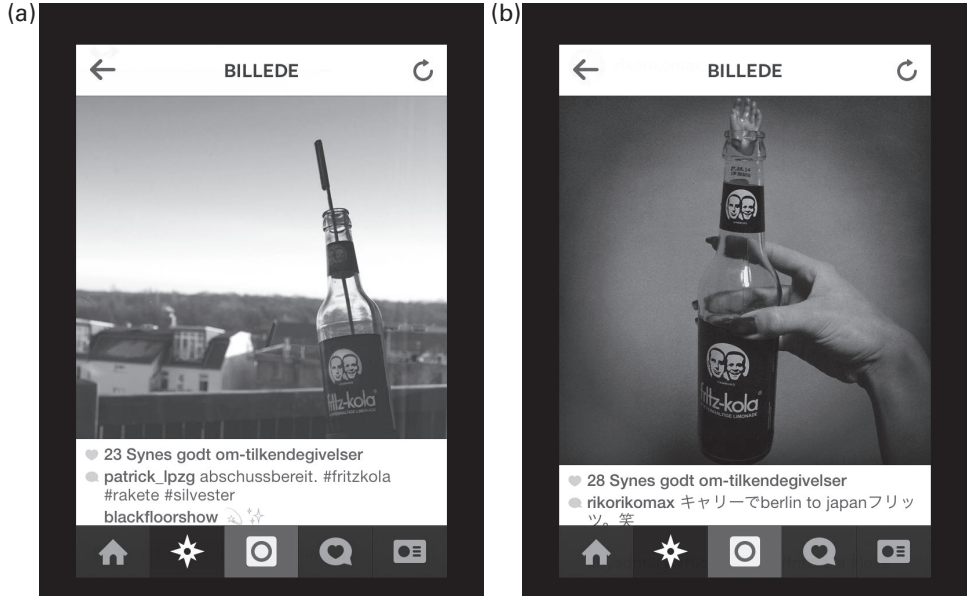

Figure 7.11
fritz-kola on Instagram, 2015. (a) Consumers communicate with each other by using hashtags (e.g., #fritzkola) and (b) produce images clearly within the black-and-white universe of the company.

and on some media channels, so that they themselves reproduce the kind of aestheticization that leads to perceiving the fritz-kola imagery with an emphasis on subculture, party, and innovation.

In the case of fritz-kola, the company sets quite strict limitations for the creative latitude of consumers. Nevertheless, consumers are invited to co-construct the meaning of the product. Being a product that takes place in a "media-environment" (Lash and Lury 2007, 9) where things can turn into media (and vice versa), the *thingness* of the product is transformed into media expressions in the form of aesthetic signs, mutable within a fixed frame. Thus, fritz-kola can be aesthetically appreciated through its sign value or through the aesthetic category of "ontological transformation," where the *ability* of objects to be transformed into image is appreciated.

Thus, fritz-kola is an example of a company creating a structure of meaning around its products, which facilitates how the products should be perceived. The brand is an important vehicle in this process, being a

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means to "facilitate and shape aestheticized consumption and consumer valorization" (Dagalp and Hartmann 2021, 9) in animating and staging the aesthetic meaning of the products, not only in media but also in physical space in the Hamburg neighborhoods St. Pauli and Schanzenviertel. As a digital media, then, Instagram sets a frame for a reflective space of creation of meaning simulation, a game with aesthetic signs and modes of aesthetic perception, which is originated by fritz-kola but circulated, reformulated, and rearticulated by consumers. The effect is, ultimately, the creation of a space of aestheticized perception, aestheticized by the company as well as by contributing consumers, where the special quality of subversive darkness is turned into the new normal and, hence, the new ordinary.

Aestheticizing Perception

To conclude, the formation of aesthetic perception of design is a complex matter of subjective perspective and cultural contextualization. Aesthetic perception is, on the one hand, localized in human subjects and thus always a matter for the individual. Aesthetic perception may vary according to subjective perspectives and articulated as individual taste, which, in becoming socially obligatory, may be anchored in local taste or brand communities of various sorts. On the other hand, aesthetic perception is continuously framed and conditioned by cultural factors of proposing and positing what can be considered as "aesthetic." It is never just given—except if you consider it to be a basic ability to appreciate beauty, but what constitutes "beauty" is also to be contested.

Through value propositions in the culture, on the market, and by the power of influential actors, perception is being aestheticized to focus on and value specific properties of objects. What is considered "aesthetic" is the result of a social and cultural construction in which consumers' perception is influenced by factors on the market and in culture in general. Furthermore, in turn, the aestheticized perception in itself has an amplifying effect of aestheticizing perception in privileging the perception of aesthetic features and qualities.

In my analysis, I have aimed to uncover features that are specific for the aesthetic perception of *design* and not for all properties of the world, including art. Embedded in this question is also the question of whether and how design objects encourage modes of aesthetic perception that are specific for design.

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In the first part of the analysis, based on a small-scale empirical study and in a focus on structural traits of aesthetic perception of design objects, my findings testify that the appreciation of design objects is based on basic sensual qualities closely affiliated with specific features of design objects and related aesthetic categories building on form and function. Contributing to enhancing appreciation are conceptual factors of symbolic meaning (e.g., in the form of personal stories) and contextual factors of media and taste cultures. An objection to my approach to the analysis is, of course, that I have found what I searched for. That is, that in having filtered the material through the prism of sensual, conceptual, and contextual dimensions of aesthetics, I have merely confirmed their presence in the empirical material. Nevertheless, I will claim that the presence of aesthetic appreciation based *specifically* on properties of design objects (and not on some kind of antiquated notion of "beauty") is remarkable in the study, along with the contribution of media and the notion of taste norm of Danish design.[23]

In the second part of the analysis, I argued that the selection of what is to be perceived aesthetically is a product of a cultural process of aestheticization, where subjects/viewers/recipients are instructed in what to focus on and appreciate. Hence, acquiring modes of perceiving design aesthetically is also a learning process where the instructing actors exerting power not always disclose themselves to be recognized and criticized. In the analysis, I chose to focus on an exhibition design framing the perception of the exhibited objects and on Instagram as a digital media creating a hall of mirrors of perception among producers and consumers.

With thematic attention to the ability of aesthetic perception to make the ordinary special while restraining the special to the ordinariness of everyday life, I aimed to look at mechanisms of aestheticizing perception specifically related to design as a medium of everyday life. Of course, I have chosen cases to prove my points, but I will still claim that a central vehicle in much of design mediation—facilitating communication about design, whether seen strictly as (mass) media or as exhibitions—is the negotiation of aesthetic perception intersecting the special and the ordinary.

Just as design oscillates between the ordinary and the special (as written about in the introduction), so does the aesthetic perception of design in the construction of an appreciation of the ordinary as special and the special as ordinary.

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Coda: Too Much Aesthetics?

To sum up, I argue for aesthetics as an entrance to understand the meaning, importance, and effect of design. An investigation of the aesthetics of design opens for a reflection how design frames human experience. Hence, my proposal of "design aesthetics" is a way of conceptualizing how design sets the scene of the world for us.

In the first, theoretical part of the book, I started out presenting the general epistemological approach to aesthetics (chapter 1) as a basis for reviewing the literature on the relationship of design and aesthetics (chapter 2). In subsequent core chapters, I proposed a framework for investigating aesthetics in design with a focus on its sensual, conceptual, and contextual dimensions (chapter 3) as well as a series of categories for framing aesthetic experience specifically related to design (chapter 4). Hereby, my ambition has been to offer basic concepts of aesthetics as a tool for analyzing design objects and for theorizing how they facilitate experience.

On this basis and employing the central framework of sensual, conceptual, and contextual dimensions of aesthetics, I have in the second part of the book studied implications of aesthetics for the creation, being, and consumption of design objects. Thus, I have investigated the role of aesthetic concerns in design practice through the vehicle of the prototype (chapter 5); how the incorporation of digital technology in design objects, making them "post-material," affects the character and role of design aesthetics (chapter 6); and finally, how consumers perceive aesthetic qualities in design and how perception of these qualities is being aestheticized by means of media and strategies of staging design, for instance, in exhibitions (chapter 7). A central ambition has been to investigate contextual factors of design aesthetics, such as the aesthetic latitude of designers and

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formative settings in technology, media, and culture, and to point out their implications.

So, where do these theoretical basics and studies in implications of design aesthetics leave us and lead us to? Does danger lurk in a too intense focus on the aesthetics of design, leaving behind economic, ecological, political, or societal topics of design? Is aesthetics, in general, relevant in times of crises, given the devastating condition of the climate, local and global inequality, the COVID-19 pandemic, and human tragedies and changed political and economic conditions caused by war? Are aesthetic concerns not just superfluous and part of a Westernized discourse of affluence reflecting long-lived, overdue privileges? In addition, as discussed in chapter 3, Wolfgang Welsch (1990, 10) warns us against the stupefying effect of becoming anesthetized, "where the elementary condition of the aesthetic, the ability to feel, has been negated" by "too much" hyper aestheticization in culture, society, and market. Welsch, who himself proposes a comprehensive theory of aestheticization with epistemological effect for the conception of knowledge, truth, and reality, aims to escape a cul-de-sac of "too much" aesthetics by taking a differentiated view into the fractures of the aesthetic and non-aesthetic. Thus, can we have *too much aesthetics* when dealing with design?

Quite the opposite, I will argue! Aesthetics is a defining factor of what design is and means. As a core aspect of understanding the appeal, role, and relevance of design for human experience on a basic level, design aesthetics feeds into economic, political, social, cultural, and ecological contexts. To understand design aesthetics is, basically, to find a way to grasp the importance of and fascination facilitated by design.

Still, a differentiated view into the *scope* of aesthetics in relation to design is necessary, on the one hand, to avoid totalizing aesthetics to be everything in design, and, on the other hand, to avoid the pitfall of differentiating between aesthetic and non-aesthetic properties of design in a way where "aesthetics" is identified with superficial styling in opposition to "core" aspects of design such as function or purpose. To conclude, let me briefly discuss the scope of design aesthetics in relation to, first, grand ambitions of "world-making" in design discourse and, second, the double structure of specialness and ordinariness prevailing in design aesthetics, indicating how aesthetics is a forming factor of design.

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In dealing with the artificiality of the world, design aesthetics can be seen in relation to the extension of design to a means of world-making, which is part of practice-oriented design discourse, historically as well as today. The process of "making world" puts the artificiality of design at stake, which is vital in the Anthropocene Age where, according to critic Clive Dilnot (2015, 174), "the artificial, and no longer nature, constitutes the horizon, medium and determining condition of the world." We live, as Jean Baudrillard stated back in 1968, reflecting on the exit of long-lived metaphysical determination of humans, in "a world no longer given but instead produced—mastered, manipulated, inventoried, controlled: a world, in short, that has to be *constructed*" (Baudrillard 2005, 28, italics in original). In this vein, optimistic-modernist visions of design have fostered radical proposals of the capabilities of design, such as Buckminster Fuller's proposal of universal designs in the 1930s and 1940s and, a tenet in design theory, Herbert Simon's 1969 generalized theory of the artificial and his notion of design as way of intervening to change "existing situations into preferred ones" (see Simon 1996, 111).

The idea of making—or changing—the world through design echoes into contemporary notions about using design as a tool for facing the climate crisis and improving the world on a large scale. Hereby, the capabilities of design are tested and sometimes stretched beyond the possible into wishful thinking. So, what is it to "make world" through design?

An example of an optimist-modernist approach to design as world-making is proposed by Otl Aicher, design theorist and in the 1950s cofounder of the Hochschule für Gestaltung at Ulm.[1] Aicher (1991a) propagates the "world as design" ("die welt als entwurf"), where design designates the widest scope of human intention and interference with the world. In his view, which carries hope for the future after years of Nazi barbarism, design is a vehicle for the human race to grasp new possibilities. Design means "producing the world" ("das erzeugen von welt") (196), leading to the result of a "human-made and organized world" of which nature becomes part and must "submit" to (185). With his background in technical-optimistic approaches for design as a strategy for (re)creating the modern world, which dominated parts of the design discourse in the 1950s and 1960s, Aicher (1991b, 76) envisions a making of civilization where "design is no longer a concept of creating form but relates to areas of philosophy, an explanation

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of the world and an understanding of the times." Design, then, is the key to comprehend all aspects of the modern world and to create "models" as a way of constructing "statements, concepts and conceptual operations," eventually enabling "a jump into the future, into a new, possible world" (Aicher 1991a, 195).

Even if Aicher sees his "projection" as a conscious way of getting hold of what is otherwise ungraspable and is aware of its limitations, there remains the question of how far the reflection of design as world-making can be drawn and if it results in a megalomaniac (albeit, impossible) ambition of humans simply defining the world and subsuming everything to our creative abilities. Design researcher Friedrich von Borries (2016) has proposed a political design theory that would bring design to the edge of its capability. His theory is political because "design is political, because design intervenes with the given condition of the world" (31). In his conception, "world" is not only "given, but also made," whereby "we are thrown into a world that we make because we live in it" (119).

The question implied by von Borries's reflection is what kind of entity the "world" is if it is to be changed by design and what, then, is meant by and is the scope of "design." First, he constructs "world" in a philosophical reflection as a unitary, abstract entity, not leaving room for all the myriad of details the world consists of. Second, von Borries's reflection could lead to a status of the designer as a demiurge, a builder of worlds, in a totalitarian way—for instance, in the form of (the ambition of) the total designs in Nazi Germany or North Korea. Von Borries claims, though, that the way out of totalitarianism is that every "projection of world [Weltentwerfen] has to be marked by openness and to understand itself as an always searching process and hereby accept incompleteness and non-closure" (132). For von Borries, then, the consequence of this openness of design is that it needs to be steered by normative, ethical imperatives of doing good or the right thing (and who is to decide that?!). Still, he does not escape the conceptual construction of design as world-making far beyond its actual scope and capability. Further, he does not, as Aicher does, propose concrete ways of world-making, such as the construction of models that, consequently (because they are merely models), in the end only operate as indirect proposals of what "world" is.

Using the precise statement of the sociologist Hartmut Rosa (2020), this kind of ambition can be seen as examples of modernist approaches of

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attempting to "make the world *available*" (8, his italics), which is to say, to make it known and, hence, controllable. In contrast, according to Rosa's view, which I support on this point, we must accept that aspects of the world always will remain unpredictable and "unavailable" and cannot be controlled by humans (such as, in Rosa's view, games, love, and wild nature) and that these aspects are important for our well-being as humans in the world.[2] As a consequence, humans cannot make the "world" as we see fit. As the current climate crisis makes painstakingly clear, human contributions to the world may be out of control; in the end, it may be megalomaniac to claim to be "making world" as we humans like. Accordingly, recent trends in design discourse attempt a more integrative approach to nature, regarding nature as its own entity and not just something to be exploited (cf., e.g., Engholm 2023).

Furthermore, in the manner of Yuriko Saito (2017), to take every mode of staging sensual appearance as a method of world-making may render the concept too general and thus without precise application. In the context of the theory of "everyday aesthetics," she claims that we "need to recognize *that* and *how* the quality of life and the state of the world are affected, sometimes determined, by the aesthetic considerations in our daily life" (Saito 2017, 196, her italics), such as preparing meals with care, closing doors silently, serving tea in a proper manner, or considering how to hang one's laundry harmoniously. Her aim is to be "actively engaged in our everyday life by *acting* on aesthetic preferences and judgments" (203, her italics). In my view, Saito broadens the scope of world-making so far that it risks losing its meaning and just becomes guidelines for how (in Saito's view) to act properly with manners and grace when, for instance, eating food or drinking tea, or to celebrate beauty as part of everyday life.[3]

In my view, the comprehensive notion of "design" as a global maker of "world," suggesting that what is wrong in the world can be made right by design, needs to be given up. Instead, priority can be given to a focus on local strategies for employing design to create new perspectives on and new possibilities in the world without a strict normative imperative. A more balanced view is to see design as "practices of relating to the world" (Siegmund 2020, 150). As stated by cultural theorist Ben Highmore (2019), to "see the world as particular sets of qualities, feelings and meanings as well as a purposefully fashioned material environment" does not entail that "design is at the centre of the world" (28). Instead, "to *position* design at the centre"

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means to "treat design as somehow foundational to how the world seems to us" and to orient "the ambition of investigation about design toward considering the world-forming activity of design" (28, his italics). This may not simply lead us to "make world" by the means of design but possibly to reflect about how design is a central element in constituting what "world" is for us and how design can be a tool for strategies for change in the face of prevalent crises.

Consequently, design may not be a demiurgic super-tool for world-making but a tool for changing materiality and constituents of what makes the "world" in specific contexts and at specific times. Thus, design designates a dynamic and potential artificiality of how "world," at least its artificial parts,[4] is present for us. How this is constituted and can be altered—in the small scale of miniaturization in the aesthetic texture of objects and the large scale of the planet—is a matter for contemporary design aesthetics to conceptualize and investigate further.

Next, a thread in the book is the seemingly paradoxical coexistence of the ordinary and the special as elements of design aesthetics. This coexistence may offer a path forward as well as provide an answer to the continuous relevance of aesthetics for design.

Taking a starting point in the reflection of how we meet and experience the world though design, design aesthetics is a general theory of how experience is being conditioned by our surrounding object world. In my approach, the implication is a framework of sensual, conceptual, and contextual dimensions of design aesthetics that takes a descriptive stance toward the appearances of the designed world. In rough, everything that is object for experience implies an aesthetics. At the same time, aesthetics may unfold the outstanding, the extraordinary, the special, or the ability to "have *an* experience" as a special experience, in the words of John Dewey (2005, 37). In this instance, aesthetics describes a special case, a "Sonderfall" (Bubner 1989, 152), where the ordinary is the background for something special to happen or stand out.

My point is that design may encompass modes of being ordinary and special at the same time, which is being reflected in design aesthetics. On the one hand, design is a central part of what makes our world and may, on the other hand and at the same time, let something stand out. What can be analyzed in sensual, conceptual, and contextual dimensions, then, is

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how the ordinariness and specialness of design *intersect* in design-as-being-everywhere and "design" as a signal of something special. In superficial styling, when design strategies just focus on making surfaces appealing and run the risk of overwhelmingly letting everything stand out, we can certainly have too much aesthetics. But as a way of conceptualizing the basic impact and meaning of design, we can only have too little—and a next step may be to engage the conceptualization of design as an aesthetic interface for experience in relation to pressing matters of today.

A future perspective for design aesthetics is to investigate how pressing issues, such as climate change, post-COVID-19, and the conditions and effects of war, are made perceptible and relevant as a matter for human experience through design. This does not mean, in my view, that sustainability or an improvement of the climate can be obtained solely by designing in aesthetic "proper" ways—that is, in making "aesthetically sustainable" products claimed to last because people care for them. This would just feed into and maintain the existing system of consumption. On this point, I am quite pessimistic. Furthermore, destructions of war are quite the opposite of the constructive ambitions of much designing.

But what we can do is to make the mechanisms and structural problems of modes of producing and consuming present and open for critical engagement, in all from services, large-scale furniture systems, and highly interactive digital design objects to everyday utensils and fast-moving consumer goods of supermarkets. Design aesthetics may not be a tool leading directly to sustainability, but it may encourage a reflection of what an aesthetics of sustainable design could be like if we do not just accept the existing system of production and consumption and step aside it.

Hereby, possible solutions for pressing issues such as Western overconsumption leading to unsustainable growth, climate change, and global inequality can find nourishment in critical investigations of how design constitutes aesthetic interfaces that allow us to engage with our surroundings and to perceive what is "world" to us. On this point, I am more optimistic!

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Glossary: A Quick Guide to Design Aesthetics

The glossary presents a selection of central concepts of design aesthetics. All concepts are described specifically in relation to design aesthetics and not in general terms.

aesthetic categories: As a vehicle of aesthetic judgment, aesthetic categories function as ways of articulating and foregrounding what is regarded as aesthetic in various contexts. The category in question influences how the aesthetic judgment links concepts and sensual meaning and, as such, frames what is in focus in the concrete aesthetic experience. Aesthetic categories vary historically, and as they change, so do the experiences they give access to. The eighteenth century foregrounded beauty and the sublime, and I argue that new categories now have taken over. In this way, the book proposes a series of categories specific for design in pointing out what is the focus of appreciation: contemporary newness, artistic experimentation, functional realism, formal simplicity, semantic reference, and ontological transformation. See chapter 4.

aestheticization: As a cultural meta-level of aesthetics, aestheticization describes the cultural process by which design is made or conceived of as aesthetic by factors that are often external to the concrete objects themselves, such as media settings or exhibitions. Through aestheticization, sensual and conceptual components in design are being emphasized to be experienced aesthetically. Historically, the process of aestheticization is driven by the development of a growing consumer society, where more and more sensual material is staged, positioned, and praised as special and imbued with aesthetic meaning. See chapter 3 and, for analysis of processes of aestheticization, chapter 7.

aesthetics: Originally named as a philosophical discipline for sensory experience in the eighteenth century, aesthetics has since entered a variety of discourses and manifestations. In the context of design—that is, as "design aesthetics" (so the title of the book)—it describes the ability of design objects (and design in general) to frame human experience by the way sensual appearances (e.g., form and material) relate to conceptual meaning (e.g., what the object is for, which is to say, its function). In the argument of the book, design aesthetics can be differentiated in sensual, conceptual,

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and contextual dimensions. Hereby, the purpose is to articulate what is specific for an aesthetics of design. See chapters 1, 2, and 3.

ambience: In the context of the sensual dimension of design aesthetics, ambience (or "atmosphere") is a way of describing what appears for us: what appearance is and how to approach it. Ontologically, ambience describes the totality (and intersection) of objects and spaces. Epistemologically, ambience unfolds between perceiving subjects and perceived objects. See chapter 3.

appeal: In design, the effect of aesthetics is to create appeal for experience. By appealing, design frames human experiencing. The appeal may be evoked by sensory means of objects, conceptually by staging the meaning of objects, or by both. The effect of appeal does not mean that objects need to be outstanding to appeal; rather, it is a point in the book that design can be ordinary and special at the same time, and that design aesthetics may encompass both modes in creating structure for experience. See the introduction, chapters 3 and 7, and the coda.

appearance: The appearance of design objects is one of our primary ways of accessing them and perceiving their appeal. As part of the sensual dimension of design aesthetics, the appearance of design objects is transmitted through our senses: mostly sight (visual), touch (haptic), and hearing (auditory) but also smell (olfactory; think of the scent of certain materials) and perhaps less commonly, taste (gustatory), even if scent and taste work together. The appearance of design objects has a static as well as a dynamic dimension because design objects as objects (mostly) of function can change in appearance. Analytically, we may ask: What is the appearance of the design, and how does it call for attention and aesthetic appreciation? See chapters 2, 3, 6, and 7.

beauty: Being a central concept of traditional aesthetic theory, beauty has for long time been pivotal in conceptualizing the aesthetics of design and continues to be so in some approaches, especially within the discipline of philosophical aesthetics. In my view, the focus of design aesthetics needs to shift away from beauty for two reasons. First, beauty tends to focus on outer appearance such as form, whereas my approach to articulate design aesthetics as an entry to experience on a broader scale may better encompass the characteristics of design. Second, consequently, beauty is a historically contingent aesthetic category reaching back to the eighteenth century, and other categories may seem more suited to frame contemporary aesthetic experiences. See chapters 2 and 4.

design: "Design" can seem like an obvious term that does not need further explication. But "design" has different meanings in different contexts—for instance, in professional design practice as opposed to popular opinions. Furthermore, the concept of design has expanded from being focused on objects to being used in a variety of settings where an intention of planning is at stake (we can design systems, meanings, the planet, etc.). In the book, design aesthetics is focused on material design objects, in part because they provide connections to existing concepts of aesthetics. See the introduction.

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design aesthetics, conceptual dimension: In the conceptual dimension of design aesthetics, the staging of meaning by design objects is in question. This regards, especially, the ability of the object to evoke a reflection about it. This dimension of design aesthetics gains its inspiration from art-related aesthetics and is less immediate and obvious than the sensual dimension in relation to design. Nevertheless, the point is not to consider design objects to be art objects but to look for the ability of design objects to call for reflection. See chapter 3.

design aesthetics, contextual dimension: Closely related to aestheticization, the contextual dimension of design aesthetics focuses on how design by different means is reflected, regarded, and positioned as "aesthetic." As in the process of aestheticization, the contextual dimension embeds design aesthetics in a consideration of cultural and societal conditions. In the book, the cultural dimension leads to an analysis of how aesthetic perception is framed in various ways by media and exhibitions (cf. chapter 7). See further chapter 3.

design aesthetics, sensual dimension: In the sensual dimension of design aesthetics, the focus is on sensory appeal: how design objects by sensory and tactile effects, outer shape, and use function create appeal to human experience. Within the phenomenological framework of the book, this is not a matter of style but of design objects relating to and framing the conditions of experience. The sensual appeal of objects can be seen as the most immediate dimension of design aesthetics. See chapter 3.

experience: As a term for how humans relate to the world, experience is a central concept for design aesthetics. Thus, the basic phenomenological claim is that aesthetics gives a central entry to understanding how design frames and conditions human experience. As a subcategory of experience, aesthetic experience is often (in aesthetic theories) described as special experiences and, furthermore, is evoked by certain object qualities, such as when the design object stands out and attracts attention. In the argument of the book, aesthetic experiences of design may at the same time be ordinary (framing experience in general) and special (when something stands out). Moreover, what is experienced as "aesthetic" is conditioned by the aesthetic categories in play, and these have varied historically. See the introduction, chapter 4, and the coda.

form/function: In design, form and function are deeply entangled, and as a pair, they belong to the tenets of design theory. Traditionally, the aesthetics of design has been affiliated with form as an outer, static, and visually detectable appearance, but recent approaches base the aesthetics of design on function, whereby the aesthetics of design objects cannot be experienced without regard to function. In the approach to design aesthetics in this book, form and function relate mainly to the sensual dimension of design aesthetics but also to the conceptual dimension if, for instance, the concept of function is challenged by the formal appearance of the object. Furthermore, form and function operate as aesthetic categories framing aesthetic experience when "functional realism" and "formal simplicity" are in play as worth appreciating. See chapters 2, 3, and 4.

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interface: Usually a technical term for describing touch points between users and technological complex objects, interface in the context of this books means "design as interfaces through which we meet the world." To regard design as a product of human creation producing artificial interfaces has two implications for the thesis of the book. First, design should be interpreted in the context of a phenomenological reflection because it frames our experiential engagement with the world, and second, aesthetics provides concepts for reflecting how this framing of experience takes place. See the preface and the introduction.

materiality: Even though design has expanded from physical objects to all kinds of solutions and systems, materiality is an unavoidable condition of all design. Even design solutions operating mostly through digital, wireless networks need material touch points. Materiality is thus a basic condition for the sensual dimension of design aesthetics. Nevertheless, what "materiality" is has been challenged with the advent of digital technology. On this note, the book introduces and discusses the concept of the "post-material aesthetics" of digital objects. Taking material objects as central touch points of interaction with the possibilities of digital technology, the aesthetics of digital objects is proposed to be post-material, as these objects transgress their own materiality when employing digital technology in being wirelessly connected to other objects. For the discussion of post-materiality, see chapter 6.

negotiation: All meaning is negotiated in various social contexts and, in the context of design, in relation to designed objects and solutions. In design aesthetics, aesthetic meaning is negotiated in two instances. (1) In design processes, aesthetic meaning is negotiated in the becoming of an object, usually with participation of actors such as designers, manufacturers, and users. A vehicle for the design-aesthetics-in-becoming is the prototype. (2) In acts of consumption, consumers relate to and articulate judgments about the aesthetics of objects. As discussed in the book, the gained aesthetic perception of consumers is often influenced by contextual settings such as media, public opinions, and taste norms. See chapters 5 and 7.

prototype: Meaning "first in time" or "first formed," a prototype is the first materialization of a design solution-to-become. In the context of design aesthetics, prototypes operate as material artifacts of the design process, proposing, probing, and negotiating the sensual appearance of the design, the relationship between this appearance and the conceptual idea content of the design, and the role of contextual factors relevant for the aesthetic appreciation of the design object. On this ground, prototypes are apt for investigating how aesthetics (in its sensual, conceptual, and contextual dimensions) is being negotiated in the design process. See chapter 5.

symbolic meaning: Whereas design aesthetics methodologically takes its starting point in objects, symbolic meaning designates the kind of meaning people attribute to objects—for instance, when objects are seen as tokens for personal remembrance. In the context of design aesthetics, the attribution of symbolic meaning takes place during acts of consumption and relates to the contextual dimension when, for

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instance, media and taste norms contribute to framing aesthetic appreciation. See chapter 7.

technology: Technology is an unavoidable condition for design, embedding it in its age and reflecting its contemporaneity. Since the industrial revolution, the development of design has been closely affiliated with developments in technology. Consequently, design aesthetics needs to acknowledge the technological element of design. Focusing on digital technology, as the most important technological development in the last 25 years, the book explores how digital technology has changed and is changing conditions in economics, culture, and media, all of which influence design. The advent of digital technology leads to a post-material aesthetics of digitally operating objects based on their ability to transgress their materiality in, for example, wireless connectivity. See chapter 6.

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Notes

Introduction

1. With a more specific focus on design, design theorist Guy Julier (2017) points out that a "design culture turn" may have taken place in Western societies with developments in the neoliberal economy and policies, where the labor market gets more flexible and "many design studios begin to pursue profit in more strategic and organized ways," and "retail design and corporate identity begin to develop in line with the growing finance and service sectors in the West." Today, Julier claims, "other parts of the world go through these changes, variations of these and/or their own processes at different times and at different places" (35).

2. As an example, the discursive formation "design thinking" has been central in setting design tools and design methods in relation to business strategies and organizational development. Whereas a design researcher such as Nigel Cross (2011) has attached the concept closely to design practice and to a certain conceptual mode of designers, a "designerly" way of thinking, the major trend has been to conceptualize design thinking in relation to a general problem solution and as an "organizational resource" for many types of businesses (Kimbell 2011). Hereby, design thinking has turned into a generic resource for everybody to tap into; reversely, we might ask whether "design thinking" has lost specificity as it has turned into a term for virtually all (including non-design-oriented) processes of solving problems. See the critical discussion by Engholm (2020).

3. The Ecological Turn was the title of a June 2020 design conference in Bologna, Italy (see https://www.designresearchsociety.org/events/call-for-proposals-the-ecological-turn-conference-bologna-italy, accessed May 11, 2022).

4. This double structure of ordinariness and specialness is a central topic for debate in philosophical aesthetics, especially Anglo-American aesthetics, called "everyday aesthetics." With the ambition to investigate the character for aesthetics experiences of the everyday, proponents of this trend either argue for elevating the ordinary into some extraordinary aspect of artlike "aura" (Leddy 2012) or for cultivating aesthetic

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sensibilities in the viewer toward the ordinary of the everyday in what Yuriko Saito (2017) sees as "*restoring* aesthetics to its original task: investigating the nature of experiences gained through sensory perception and sensibility" (1, her italics).

5. Whereas Haug does not change the character of his analysis in the new book-length addition of *Kritik der Warenästhetik*, he reactualizes it by seeing capitalism as operating by new means through technological developments such as the Internet. In addition, the section on the commodity aesthetics in the former German Democratic Republic (1948–1990) in the 1971 version is omitted. At the time of original writing in the 1960s, Haug saw the communication of commodities in the German Democratic Republic (once known as East Germany) as a kind of ideal model, but he says in the preface to the 2009 version that he was wrong and only able to analyze it from the distance in the West.

6. The COVID-19 pandemic and war have repeatedly made me recall the Talking Heads song "Life during Wartime" (from the 1979 album *Fear of Music*), which describes the state of emergency or exception that people may experience in such situations: "Why stay in college? Why go to night school?/ . . . Can't write a letter, can't send no postcard,/ I ain't got time for that now." Taking the live performance of the song in the concert movie *Stop Making Sense* (1984) into consideration, where the band members keep running at the spot, the song indicates how such crises affect everyday life with a frustrating and devastating combination of static or apathic restlessness with little room for constructive action.

7. The discussion of the large-scale impact of design is especially a part of practice-oriented design education and design research. In this manner, design research conferences often feature themes with focus on change, the future, or societal complexity such as "Design's Big Debates" (Design Research Conference 2014, Umeå, Sweden) and "Future-Focused Thinking" (Design Research Conference 2016, Brighton, UK). Or, as stated in the introduction to Design Research Conference 2022 in Bilbao, Spain: "We have recently lived through extraordinary times where design in many forms has been necessary to counter the enormous problems we have faced and continue to face in our conflicting coexistence." (https://www.drs2022.org/drs-2022, accessed November 16, 2022). Such focus reflects, in my view, a shift in prioritization in much practice-oriented design education and research from the objects of design (which, admittedly, still are an outcome of design education) to concepts of design (with a more or less visionary tone). A byproduct of this shift is, further, that design's historical heritage in the arts is sparsely present in contemporary design discourse.

8. Even if design is important, as I also will claim, sometimes the aspirations of the design community may be too optimistic in believing that design can solve some of the bigger problems in the world, which in the end are caused by increasing inequalities in the world, warfare, or scrupulous companies promoting damaging products such as weapons or claiming monopolies on technologies. Design may

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be effective for creating better solutions for specific problems or better applications of technology, but I believe that many of the *malheurs* of the world are caused by deeper structural issues of power and inequality in economy. In his book *Deviant Design* (2022), design researcher Craig Martin point out that design and designers also may be complicit in creating inequality by being part of a "politics of marginalization" (6), resulting in inequalities on a local scale of differentiated and differentiating products and globally in the system of production as such. On this basis, Martin calls for an "appreciation of the deeply unsettling place of design in the perpetuation of unjust practice" (6). Having no illusions of the prosperous, affirmative powers of design, Martin nevertheless sees a potential for changes in exploring the "complexity of social practice" (7) that design is part of. At the same time, he criticizes designers for a "tendency to address wicked problems by taming them" (49), whereby designers, in his view, believe they are solving global-scale issues but, in simplifying them, just scratch the surface. My field of investigation is a different one, but I will follow Martin so far to claim that the possibilities of design to evoke large-scale global changes in a positive direction are limited if we inhabit and maintain a system of inequalities.

9. Design as a constructive tool for progressive development and for modernizing societies has also been reflected in writings on design history and cultural histories in design. Consider, for instance, *Designing Modern Britain* (Buckley 2007), *Designing Modern Germany* (Aynsley 2009), *Designing Modern Norway* (Fallan 2017), and *Designing Modern Japan* (Teasley 2018). Beside Fallan's book, the titles are all from the British publisher Reaktion Books. Despite their similar titles, the books do not appear to be part of a series with a series foreword. But Reaktion Books has probably employed an editorial strategy of providing the books with similar titles in order to let them appear to be part of a greater narrative of how design has shaped modern societies.

10. "We are drowning in electronic waste," says the title of the journalistic story of a research project at the University of Southern Denmark attempting to employ models of "circular economy" in order to enable technological "products—or the materials from which they are made—to circulate within our society's different systems for as long as possible." This can be done, so they claim, "by designing longer-lasting products, by reusing and repairing products, and by recycling materials from discarded products in new products" (see https://www.sdu.dk/da/nyheder/nyviden/alle_artikler/2018/ecircle, accessed November 10, 2022).

11. In *The Philosophy of Design*, written within the framework of analytical philosophy, Parsons problematizes that design objects may have moral agency, as this concerns "human decisions and actions," but he acknowledges that "certain artefacts may shape the way people live, and the lives they have led, and make possible certain moral decisions that were otherwise impossible" (Parsons, 2016, 145–146). I agree with Parsons that this is the role design qua material artefacts can have.

12. I thank Carsten Friberg for this point.

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13. Here, I employ the wording of Annika Schneller (2018).

14. Chapter 3 in this book builds in part on my contribution to this anthology (Folkmann 2018a).

15. This anthology testifies along with the aforementioned anthology, *Philosophie des Designs* (Feige, Arnold, and Rautzenberg 2020), that much is going on at the German design and philosophy scene. Authors taking a lead in the discussion, and represented in both books, are Daniel Martin Feige and Oliver Ruf.

16. My work on *The Aesthetics of Imagination in Design* (Folkmann 2013) reads as a previous contribution to a conceptualization of design from a phenomenological perspective as it "focuses on design as a vehicle for enabling, creating, and mediating the possible in relation to experience" (7). To take design seriously as a medium of the modern world is also to acknowledge that this interface is changeable and can be defined as the verge of the given and the possible.

17. In the format of a one-liner, German sociologist and design theorist Lucius Burckhardt (2010) in 1980 famously claimed that "design is invisible." Burckhardt's aim was to open the eyes of designers to the sociocultural context of design as a part of design, "invisible total systems, consisting of objects and interpersonal relations" (217). In Burckhardt's view, both visible as well as invisible aspects of design are a part of the ways by which design frames experience within a social context by proposing the constituents for this framing.

18. On this point, Fallan is implicitly arguing against the discipline of design culture, which Guy Julier (2014) positioned in a critical stance against (broad) disciplines such as design studies and design history. Julier's argument was the better fit to grasp the *contemporary* contextual complexity of design. The argument is that design culture "is a particularly contemporary concept that springs from a set of geopolitical changes, economic movements and cultural expressions" (239).

19. If institutional affiliation is a criterion for the consolidation of a discipline, design history is highly consolidated as it is being taught in many universities and design schools. Often, however, it is not seen as a discipline in its own right but plays the role as a tool for improving design practice. With the words of Kjetil Fallan (2013), the discipline could benefit from being "de-tooled" as a discipline not in service for someone but only in service for itself. In its present formulation as a comprehensive cultural analysis of design, design history reaches back to the inauguration of the British-organized Design History Society in 1978 and the initiation of the *Journal of Design History* in 1988. But a historical interest in design reaches back further, to the 1930s and Pevsner's ([1936] 1991) publication of *Pioneers of Modern Invention*, with a focus on the designers as the creative origin of design. Since the 1980s, the focus has shifted to an interest in the many actors contributing to the creation of design (e.g., Dilnot 1984a, 1984b; Forty 1986; Fry 1988; Margolin 1995), and since John A. Walker's seminal *Design History and the History of Design* (1989),

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design history has been characterized by an interest in the cultural circuit that circumscribes the process of attributing meaning and value to design objects in all phases, from the conditions of production to the possibilities of consumption, including the so-called Production-Consumption-Mediation (PCM) paradigm (Lees-Maffei 2009), which examines how design develops not only in phases of production but also in the mediation taking place in user manuals, magazines, and advertising.

Chapter 1

1. Wikipedia defines "aestheticians (or aestheticists)" as "people who theorize about the nature of art and beauty; in this, two central topics (and ideological hindrances for a more open conception) of aesthetics are present: Art and beauty." Search term: "List of aestheticians."

2. Translated in 1954 into English as *Reflections on Poetry: Meditationes Philosophicae De Nonnullis Ad Poema Pertinentibus* by Karl Aschenbrenner and William B. Holther (Baumgarten 1954).

3. In their excellent analysis of contemporary aesthetics, *Gegenwartsästhetik*, Moritz Baßler and Heinz Drügh (2021) make a plea for the actuality of Kant (and not many other than him) for an aesthetics aimed at contemporary culture. Through Kant, we can conceive aesthetics to be an experience and thinking through forms that unfolds as a "complex negotiation of sensuality, concept and emotion" (39). I believe Baßler and Drügh to be right and, in addition, offer a more precise conceptual framework for analysis than much of the Anglo-American trend of "everyday aesthetics."

4. In the German original, emphasis is marked by spaced types: "S c h ö n ist das, was ohne Begriff allgemein gefällt" and beauty related to a "uninteressiertes und f r e i e s Wohlgefallen."

5. On nature as a topic for aesthetic reflection (prior to the present ecological crisis), see Seel 1996.

6. A central part of the discourse on aesthetics has, in this way, been normative in an impulse to define "right" frameworks of appreciation. An important text on this point is Schiller's *Über die ästhetische Erziehung des Menschen* (1795) on letting the creation of the new, ideal nation go through the aesthetic education of man in learning the value of beauty. The aim is to wander the road of the aesthetic, as "it is through beauty that one derives at freedom" (Schiller 1910, 162). The normative goes as a thread through later development of a canonical discourse on the value of art, the establishment of art museums as temples of artistic appreciation, and the education of "good" taste.

7. In his 2017 book *Cultural Feelings: Mood, Mediation and Cultural Politics*, Highmore continues his exploration of the connection of cultural analyses and subjective emotions in the light of affect theory.

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8. The reference is to the second edition of the 2000 book; the chapter on somaesthetics was not included in the first edition.

9. Heidegger's German is almost untranslatable, perhaps even more for an author with a different native language (Danish) than the two in play in this context. Heidegger's (1950) original text reads like this: "Die Kunst ist das Ins-Werk-Setzen der Wahrheit" (65) and "Eine Lichtung . . . ist, vom Seienden her gedacht, seiender als das Seiende" (40).

10. In his text, Heidegger mostly speaks of "art" or "artwork" in a general manner, even if he anchors his discussion in an analysis of a painting of a pair of peasant's shoes by Vincent van Gogh.

11. In German: "Ist in den Kunstwerken alles und noch das Sublimste an das Daseiende gekettet, dem sie sich entgegenstemmen, so kann Phantasie nicht das billige Vermögen sein, dem Daseienden zu entfliehen, indem sie ein Nichtdaseiendes setzt, als ob es existierte. Vielmehr rückt Phantasie, was immer die Kunstwerke ab Daseiendem absorbieren, in Konstellationen, durch welche sie zum Anderen des Daseins werden, sei es auch allein durch dessen bestimmte Negation" (Adorno 1970, 258–259).

12. Also, Harry Lehmann points out that Bubner is the first in a context of contemporary German aesthetic theory to conceptualize aesthetic *experiences*. He does so in the 1973 article "Über einige Bedingungen gegenwärtiger Ästhetik," which is reprinted in *Ästhetische Erfahrung* (Bubner 1989).

Chapter 2

1. Aesthetics in relation to design may be considered slippery and difficult to grasp. This an impression I derived from several contexts of design research, whether in relation to design history research or practice-oriented design research. On the one hand, aesthetics is acknowledged to be a part of the discourse on design—this and that design can have this and that aesthetics. On the other hand, the concept is often just used as a part of the discourse on design but rarely submitted to conceptual reflection. The purpose of my book is to offer such a reflection and to make it productive for the understanding of design.

2. Actually, Stockmarr's thesis is a long review of different positions and formulations of the role of aesthetics in relation to design. She reviews Forsey (2013a) and Folkmann (2013) at length, but since she was defending a PhD thesis in 2014, she could not have reviewed later proposals, such as Feige (2018) and Geiger (2018).

3. At a seminar at the University of Southern Denmark, Kolding, in 2016 on "Aesthetics and Aestheticization in Design Culture," design historian Grace Lees-Maffei pointed out in her presentation that the discipline of design history, which since its establishment as an independent discipline in the 1970s has been ostracizing

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aesthetics as too related to art history, could benefit from relating to aesthetics as a way of understanding consumer perception.

4. Further, they are all of Canadian provenience, which, however, seems more coincidental than motivated by a special discussion within the field of philosophical aesthetics in Canada. The common focus on beauty is, in my perspective, to be contested.

5. See also the related conference papers for shorter introductions to her argument (Forsey 2013b, 2015).

6. In this way, Forsey (2013a) also states: "Our quotidian interactions with design are written into its ontological structure: it cannot stand outside history" (245).

7. I will take up this discussion in chapter 4 on function as an aesthetic category for design. My critique of Forsey's concept of the functional as leading to a specific aesthetics of design has been nurtured by working with her concepts with students. Here, the result has often been that her concepts are better suited for a general discussion of what the aesthetics of design is than analyzing specificities of the aesthetics of design based on concrete objects.

8. Remarkably, Parsons and Carlson (2008) stick to the concept of "beauty" instead of "aesthetic appeal" even if they in the preface point out that "'beauty' is used, as philosophers occasionally still use it, to mean 'aesthetic appeal in general' rather than the specific sort of aesthetic appearance it typically suggests" (xiii). In the rest of the book, however, "beauty" seems to signify a specific sort of (positive) aesthetic appearances.

9. See Goldman 2018 and the discussion in chapter 6 in this book.

10. See also Kendall 2018, 113: "Parsons' account also prioritizes modernism to such a degree that the book exhibits an almost willful blindness to trends in design that came about either in response to the deficits or overreach of high modernism or simply in its wake. User-Centered Design, Data Driven Design, Speculative Design, and Conditional Design are only a few of the trends whose absence springs to mind." Kendall's review is very critical, but it rightly points out that what Parsons's book is about is a full-scale analysis of design within the framework of analytical philosophy: "Many of the arguments and observations from analytical philosophy that he marshals in this appeal are compelling in their way and even occasionally nuanced. . . . A better title for the book would have been *An Introduction to an Analytical Approach to a Philosophy of Design*" (Kendall 2018, 113–114). For a more positive review, which aims to reconstruct Parsons's argument, see Galle 2016.

11. In the full German quotation: "Design ist eine *ästhetische Form der praktischen Welterschließung*. Als Welterschließung gibt Design der Welt ein spezifisch menschliches Gesicht; als ästhetisches Phänomen geschieht das je nach Gegenstand in eigener Weise. Wenn Designobjekte tatsächlich ästhetische Phänomene sind, so heißt das Folgendes: Sie finden nicht so sehr Lösungen für gegebene Probleme, sondern bestimmen die Probleme im Lichte ihrer Lösungen vielmehr zugleich neu" (Feige 2018, 9, his italics).

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12. In German: "Die grundsätzliche Ebene des Designs besteht in der irreduziblen Geformtheit der Funktionen von Designgegenständen" (Feige 2018, 143).

13. On this point, Feige (2018) criticizes Forsey's aesthetics of design to be an "aesthetics of the ornament" (136n109), which he attaches to Forsey's (2013a) point that "considering its style" is a way to see how an object fulfills its function (166). In my reading of Forsey, this would be to exaggerate the connotative meaning of the word "style" as an outward quality of design objects; instead, Forsey's argumentation stresses the role of the *concept* in understanding what a design object is about, in function as well as in "style." It may be that Forsey does not offer instrumental tools for analyzing the relationship of form and function, but neither does Feige; his proposal stays at the level of philosophical discourse of abstract conceptual analysis.

14. In German: "Ästhetisch sind Designgegenstände . . . dain, dass *jeder gelungene Designgegenstand seine Funktion im Medium von Prozessen der Formgebung neu erfindet*" (Feige 2018, 138, his italics).

15. As Steinbrenner (2010, 21) states, "I stand for the conservative point of view that good design can be seen a successful mixture of functionality and aesthetic or artistic quality."

16. That design objects through their calculated appearances more emphatically aim to be experienced aesthetically can be seen in a homologous relationship with Roland Barthes's (1977) reflection that commercial images are the most interesting to investigate with regard to pictorial communication, as they emphatically aim to be perceived by the recipient. One could modify this, at least, so that it can be said about the commercial images of Barthes's era in the 1960s; today, such images may also be more subtle in their appeal to the consumer.

17. On this topic, see chapter 6.

18. In German: "Designästhetik ist weniger eine Theorie der schönen Dinge als eine Theorie des reflektierten Lebens mit Dingen. Gerade die Designgeschichte lässt sich nur auf diese Weise interpretieren: Sie fragt, wie Menschen durch den ästhetischen Umgang mit Artefakten und Szenarien das Andersmöglichsein von Welt entwerfen" (Geiger 2018, 100–101).

19. Herriott (2022) writes about the "wow" effect in the book (118). At the book launch on September 1, 2022, at the Design School Kolding, where Herriott works as an associate professor, he further differentiated between effects of "wow!" and "yikes!" (obviously being strong positive and negative responses, respectively). If you conceptually cannot detect what the product is about, he supplemented the range of responses with a "hmm?" The point is that the reaction to the products is carried by norms of what is good and what is not, whereas I will advocate for a descriptive approach.

20. The book was originally published in Danish as *Æstetisk bæredygtighed* (Harper 2015).

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21. At a 2015 seminar on aesthetics and sustainability at the University of Southern Denmark, Kolding, Kristine Harper responded to the question, "Why stick to the categories of the beautiful and the sublime when dealing with design?" Her answer was that these relate to common features of human experience across times and beyond historical contextualization.

22. Beyond the scope of this book and as a possible topic for further studies, I believe central insights about the desire-driven mechanisms of design can be gained by engaging with the proposal that Colin Campbell (1987) made in his book on the "spirit of modern consumerism." Campbell points out, rightly, that modern subjectivity in Western societies was invented in Romanticism in early nineteenth century as a call for creativity, expression, excess, and endless desire and that modern consumerism in its craving for new experiences is founded on this notion of subjectivity. The problem of most contemporary approaches to sustainability in design today is that design mostly is regarded as a means to foster creative solutions, but these solutions just maintain the existing system of consumption, where nobody (in affluent societies) must be deprived of anything. The paradox is that design as a driver of the new is a central part of the problem. Design is often seen as a technofix enabling a shortcut to sustainability, whereas the problem is that affluent parts of the world live unsustainably and that design nurtures this mode of living. If we are to change the production-consumption system of design, accordingly, we need to focus on the mechanisms within the subjects of consumers that nurture the desire for the new. Hereby, promising perspectives may be found in looking at and challenging structural patterns of modern, consumption-driven subjectivity.

Chapter 3

1. The chapter builds on previous presentations of the three dimensions of aesthetics. The three dimensions were presented in the book *The Aesthetics of Imagination in Design* (Folkmann 2013), and before that, the first two dimensions were presented in a journal article in *Design Issues* (Folkmann 2010). This chapter is newly written but draws on an earlier book chapter with a focus on the relationship between aesthetics and experience (Folkmann 2018a).

2. On models of communication in design, see Crilly et al. 2008, Barnard 2006, and, most importantly, the Offenbach theory of product semantics (e.g., Gros 1983; Steffen 2000).

3. The aim is to wander the road of the aesthetic, because "it is through beauty that one derives at freedom" (Schiller 1910, 162).

4. In *The Aesthetics of Imagination in Design* (Folkmann 2013), I referred to these dimensions as a sensual-phenomenological level, a conceptual-hermeneutical level, and a discursive-contextual level.

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5. A more radical version of changeability though use can be seen in the *modification* of objects through use; see Brandes, Stich, and Wender 2008.

6. As pointed out by Feige (2020b), the "use of design objects is not particularly or primarily based on contemplation" but on "practical engagement" (58). For Feige, this leads to a conclusion that the theory on aesthetic experience, "ästhetische Erfahrung," is less relevant for a theory on the aesthetics of design since this, in his opinion, mostly is a theory on contemplation. I will contest this view and posit the theory on aesthetic experiences as, admittedly, a theory on special experiences that are not necessarily bound to contemplation. Further, as Saito (2017) points out, "We are never passive and inactive when it comes to aesthetic experience" because we always are in a "creative engagement with what we are perceiving" (53), regardless of artworks presupposing distant perception or everyday objects requiring direct interaction. Appreciation "as engaged, not disinterested," is also a cardinal point in Arnold Berleant's (2010, 61) theoretical focus on sensual perception as central for aesthetics.

7. In German: "Wir nehmen hier keine *andere* als die Welt der sinnlichen Objekte wahr, aber wir nehmen sie durchaus *anders* wahr: mit einem gesteigerten Gefühl für das Hier und Jetzt der Situation, in der sich die Welt ereignet" (Seel 2007, 14, his italics).

8. As pointed out by Highmore (2011, 43), Dewey is reluctant in describing the content of the special experiences; his "descriptions of significant aesthetic experiences remain almost silent." Dewey aims to theorize their form (as coherent, marked by unity, and so on) but does not describe what takes place in these experiences (i.e., how they feel).

9. In a discussion of aestheticization of the lifeworld, the philosopher Rüdiger Bubner (1989) takes this idea further and regards "aesthetic experiences" as an "opening of an extraordinary and unexpected realm of complete purposelessness" on the background of "everyday functions" (151). Bubner in this way posits aesthetic experiences to be a special case, "ein *Sonderfall*" (152, his italics), being dialectically dependent on the ordinary.

10. Ludden, Schifferstein, and Hekkert (2008) rightfully point out that the type and complexity of a product influence how much surprise is appreciated: "In products with a complicated functionality that requires full attention from the user, a surprise probably will not be appreciated. However, in products that people can use without any cognitive effort—for example, a vase—a surprise may be welcomed by the user." (37). Roughly speaking, we do not want smartphones to challenge us (if they do, they will mostly be perceived to be poorly designed), but simple utensils may do so.

11. The German concepts are "Auffälligkeit, Aufdringlichkeit und Aufsässigkeit" (Heidegger 1977, 74). I prefer to reference the German original but have here conferred with an English translation (Heidegger 1962, 104). I thank Felix Kosok for making me aware of the relevance of Heidegger in this context through his presentation "Auffällige Formen, aufdringliche Typen, aufsässiges Zeug: Versuch einer

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Designästhetik" at the seminar on the Ästhetik des Designs in 2020 in Stuttgart (cf. Feige, Arnold, and Wildt 2020). Remarkably, at the seminar and in the affiliated but not directly related anthology *Philosophie des Designs* (Feige, Arnold, and Rautzenberg 2020), Heidegger testified to be a basic reference in the German community for design aesthetics, foremost through his analysis of Zeug but also through his reflections on the work of art (Heidegger 1950; cf. chapter 2 of this book).

12. The theory of the ekstasis of things is most widely unfolded in *Aisthetik* (Böhme 2001, 131–144).

13. In German: "In der ästhetischen Gestaltung geht es aber genaugenommen gar nicht um Eigenschaften, also um etwas, was die Dinge an sich haben und was sich in ihrem Gebrauch auswirken kann, etwas, das zweckmäßig sein kann, sondern es geht um Ekstasen, d.h. um die Weise, wie die Dinge aus sich heraustreten und wie sie sich im Raum präsentieren" (Böhme 2001, 137).

14. Interestingly, Gernot Böhme (2016) proposes a different organization of aesthetic theory. In his opinion, modern aesthetics has two major sources. The first source, German rationalism, to which Baumgarten belongs, leads to the trend of identifying aesthetics with the theory of the artwork. The second source, English sensationalism, deals with questions of taste and aesthetic education. In his adaptation of the English sensationalists and the question of judgment, Kant is associated with this trend. In contrast, my drawing of the major lines in aesthetic theory identifies Baumgarten with a focus on the sensual and Kant with an interest in the conceptual. Böhme is right in pointing out that Baumgarten's philosophy is born out of a rationalistic impulse and deals with artworks and that the question of judgment is central for Kant (see also Böhme 1999). Nevertheless, I will argue that Baumgarten's special contribution to aesthetic theory is his focus on the "lower senses," and that the importance of Kant's *Kritik der Urtheilskraft* for aesthetic theory is its epistemological approach to the aesthetic judgment as a way of reflecting sensual material in relation to concepts.

15. That idealization and a total lack of meaning can be the flip sides of the same coin is a point made by Maurice Blanchot (1989) in an analysis of "Two Versions of the Imaginary."

16. Design that by intention is difficult to decode or deliberately plays with the appearance of the idea is not the same as "bad" design, where the idea unintendedly is poorly conveyed.

17. Thus, on the one hand Adorno remains pessimistic with regard to change, which is also the conclusion in *Die Dialektik der Aufklärung* (Adorno and Horkheimer 1989). Here he argues that the dominance of reason since the Enlightenment in a dialectical movement performs a reversal and leads to barbarism and fascism. In *Ästhetische Theorie*, the same pessimistic tone continues even if there are glimpses of utopian optimism, as he speaks of an "epoch where the real possibility of utopia—that the

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Earth, according to the situation of the productive forces, here, now, immediately could be Paradise—on the utmost edge unites itself with the possibility of total catastrophe" (Adorno 1970, 56).

18. The full passage in German (Adorno 1970, 188): "Mit den Rätseln teilen die Kunstwerke die Zwieschlächtigkeit des Bestimmten und Unbestimmten. Sie sind Fragezeichen, eindeutig nicht einmal durch Synthesis. Dennoch ist ihre Figur so genau, daß sie den Übergang dorthin vorschreibt, wo das Kunstwerk abbricht."

19. Like many other philosophers of aesthetics—for instance, John Dewey—Seel claims an application of this theory beyond art but discusses it mainly through examples of art.

20. In German (Seel 2007, 38): "Objekte der Kunst sind Medien einer Erfahrung, die sich als ein Prozess des Verstehens abspielt, der nicht auf das Resultat eines Verstandenen zielt. . . . Verstehen von Kunst geht es vielmehr um ein andernorts unmögliche Begegnung mit andernorts unmöglichen Möglichkeiten der Wahrnehmung unserer selbst."

21. The investigation of shininess in the perspective of design history was a 2013 special issue of the Journal of Design History, edited by Nicolas P. Maffei and Tom Fisher, who in their introduction discuss how shininess historically has been produced in the context of design and how the availability of shininess affects how it is being perceived as precious versus ordinary.

22. Haug 2009 was first mentioned in the introduction. In Haug's actualization of his former analysis, he points out that the forces of production and destruction of the capitalist system have found new expressions in the digital age, and that information technology is merely another tool in the hands of the "capital," this time on a global scale (215).

23. An interesting contrast to Haug's view on the surface of things is offered by Prasad Boradkar (2010) whose concept of "skin" functions as a sensually given and materially present mediating factor between an experiencing subject and an object aiming to appeal. Whereas Haug's analysis is based on a critical examination of societal contexts creating surface appeal, Boradkar focuses more narrowly on the role of surfaces for communicating matters of form, symbolic values, and function, which may even be projective in the construction of the recipients of the design: "Designers tinker with the surface characteristics of form, contour, materials, color and texture to create the aesthetic experiences that users seek and desire. These physical features of things are by no means the sole preoccupations of designers who strive to create aesthetic experiences and consumers who seek them. Price, performance, packaging, advertising, warranties and other factors play a role as well. Many of these attributes of the products are 'written' on the surfaces. And just as the human skin operates as a protective, communicative, aesthetic layer of the human body so does the object skin" (Boradkar 2010, 151). Boradkar accepts (and explores)

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the role of the surface in a capitalist economy based on the creation and production of desirable consumer goods, whereas Haug in his analysis aims to criticize and possibly go beyond this logic.

24. To the concept of unrealization, see chapter 5, "A Phenomenology of Imagination in Design," in *The Aesthetics of Imagination in Design* (Folkmann 2013).

25. I thank Matilde Lundorff Christensen (2019) for making me aware of this company and its strategy on Instagram, brilliantly analyzed in the master's thesis *Designvirksomheders brug af Instagram—som platform for Social Media Marketing* (The Use of Instagram in Design Companies: Instagram as a Platform for Social Media Marketing).

26. In an earlier version of this framework, I tried to pose the opposite question and wondered how design objects are effective in processes of aestheticization (Folkmann 2013). That focus was guided by the general focus on imagination and the question of object ontology. Here, I still have a focus on object ontology but relate the discussion more directly to cultural theories.

27. I believe it is necessary to be highly critical of a slogan such as "Democratic Design": When conferring meaning from a political-societal context to a commercial setting of selling goods, IKEA instrumentalizes values connoting "welfare society" ("Design for Everyone") and positions itself as an important societal factor. For a critical analysis of discursive constructions in and by IKEA, see Kristofferson 2014.

28. To this operation of images, in principle applicable to all images, see Folkmann 2019a.

Chapter 4

1. The theoretical part of the chapter builds on the work on aesthetic experience in Folkmann and Jensen 2017 (where the theoretical part is my contribution and the case part, not included in this chapter, is Jensen's contribution) and Folkmann 2018c.

2. Even though, as clearly pointed out by Lehmann (2016), Kant does not explicitly talk about "ästhetische Erfahrung" (18).

3. In this way, Forsey's book can be read not only as an aesthetic theory on design but also as a plea for the relevance of Kant's third critique.

4. Forsey (2013a) states—and celebrates, rightly!—Kant's position: "Kant's account is . . . unique in its attempt to make aesthetic judgments objective and necessary without reverting to an ontology of beautiful objects; to locate that objectivity within the faculty of judgment is a philosophical coup that has not been repeated or superseded" (134).

5. For a wider examination for the role of schematization for design, especially for the creation of design, see my book on *The Aesthetics of Imagination in Design* (Folkmann 2013).

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6. Ernst Oldemeyer (2008) complements the list in his work *Alltagsästhetisierung* when he talks of the "aesthetic qualities of the ironical, humorous, witty, interesting, ugly, vital, boring, evil, grotesque, obscene, disgusting, cruel, etc." (61).

7. Rosenkranz is a dialectical thinker in the tradition of G. W. F. Hegel (and a student of his) as he is interested in the ugly as a reversal of beauty. In accordance with his time, he states that beauty is absolute, whereas *das Häßliche*, the ugly and nasty, is relative to beauty.

8. The 2012 reference is to the full version of Ngai's thinking on aesthetic categories, the book *Our Aesthetic Categories*, which at length discusses Ngai's concrete proposal of the categories of the cute, the interesting, and the zany. The 2010 reference is to an article with the same title, which in a more synthetic form introduces to the concept of the aesthetic category.

9. Without being too philological about the different versions of Ngai's texts, I note that in the earlier article, Ngai (2010, 948) writes that the "concept of 'aesthetic'" (instead of "aesthetic experience" in the 2012 version) has been changed due to the conditions of late capitalism.

10. Another proposal of contemporary aesthetic categories is given by Daniel Harris (2001), who proposes categories such as cuteness, quaintness, coolness, the romantic, zaniness, the futuristic, deliciousness, the natural, glamorousness, and cleanness, each a "broad principle" that in total testify to the richness of "appearance of popular culture" (xii). *Cute, Quaint, Hungry and Romantic: The Aesthetics of Consumerism* is written as journalistic essays, and the problem with Harris's book is its lack of conceptual definition and discussion (it does not employ the concept of "category"), resulting in a descriptive flow of all kinds of appearances in contemporary culture. On this point, Ngai is a more solid rock to build on.

11. Whereas Kant foremost spoke of the sublime being evoked by experiences in nature, the analytical question in the aftermath of Kant that has been raised by, among others, Jean-François Lyotard (1994), has been how works of art may point to kinds of experiences where the limit of the comprehensible is challenged in general. Ngai follows this line of thought as a reason for not skipping sublimity entirely.

12. The interactive aspect of design, which also sets a frame for aesthetic experiences, will not be dealt with here as a category; however, in chapter 6, it is part of the discussion on digital technology in design.

13. This is a discussion different from that of the ontological difference of design and art, which is at the fore in some of the philosophical treatment of the aesthetics of design (notably, Forsey 2013a; Feige 2018).

14. For examples, see the book *original bauhaus übungsbuch*, which includes 50 exercises taught as part of the Bauhaus curriculum in the period of the school (Holländer and Wiedemeyer 2019).

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15. In their article "Design Thinking between Rationalism and Romanticism: A Historical Overview of Competing Visions," design historian Ida Engholm and anthropologist Karen Lisa Salamon (2017, E1.1) attempt to present "a longue durée history of design thinking" that conceptualizes working with design in practice, in a dialectics of rationalism versus intuition, logics versus creativity, and Enlightenment versus Romanticism. As demonstrated in their analysis, the pull toward intuition and experimental artistic creativity almost disappears in the history of the *discourses* on design thinking and design methodology, whereas, I can add, it remains an aspect of *practice* in much design education.

16. In relation to his concept of aesthetic durability, Loos (2010) makes the radical implication that objects with such qualities could be sold at higher prices, whereby the worker could "earn more money and work less longer" (85). In the end, Loos aims at saving work and creating better working conditions for workers, not maximizing profit. On Loos and ornamentation, see also Riisberg and Munch 2015.

17. Thomas Hauffe (2008) points out rightly that the demands of modern design for "functionalism, simplicity, and realism" not only derive from new developments in production technology but also from a "bourgeois-protestant ethics" (20–21), whereby Hauffe implicitly relates to Max Weber's sociological thesis from 1904–1905 that the Protestant ethics of hoping for the grace of God by working hard, constraining oneself, and refusing desire to obtain it is closely affiliated with the rise of the spirit of capitalism (see Weber 2017).

18. What is seminal about Pazaurek's approach is its ambition to go into detail and explain the reason why the design is bad: Where and why is there a failure in material, construction, or decoration? This method of describing the phenomenology of bad taste is different from the later phenomenological approach by Vilém Flusser (1993), who focuses on types of objects within material culture, such as the street lamp, the bottle, and the bed, and extracts how they reflect the organization of the physical world in relation to metaphysical meaning entities. Whereas Flusser is interested in the type and its implication but not the specific details of the design, Pazaurek's interest is in the detail.

19. For Pazaurek, kitsch is only one type of taste disturbance, whereas I use the concept with a wider meaning for objects in general violating the code of modernism. The full quotation in German is: "Der äußerste Gegenpol der künstlerisch durchgeistigten Qualitätsarbeit ist *geschmackloser Massenschund* oder *Kitsch*, der sich um irgendwelche ethischen, logischen oder ästhetischen Forderungen nicht kümmert, dem alle Verbrechen und Vergehen gegen das Material, gegen die Technik, gegen die Zweck- wie Kunstform vollständig gleichgültig sind, der nur eines verlangt: das Objekt muß *billig* sein und dabei doch wenigstens möglichst den Anschein eines höheren Wertes erwecken" (Pazaurek 1912, 349, his italics).

20. In addition, Bayley (2012) points out that another trait of kitsch is the integration of plants in products, which especially came to expression as a trend of using

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ferns in all sorts of products in the middle of the nineteenth century, which was some time before Pazaurek's design regime. On the role of plants in a more general perspective of (interior) design, see Sparke 2021.

21. We have not yet witnessed a "bad design" prize as we have in the film industry.

22. The exhibition presented a different opposition to "good" than "bad," that of "evil." Evil should not, however, be understood literally as design doing evil. This meaning of evil could be found at another exhibition that took place in 2012 at Röhsska in Gothenburg, Sweden, displaying weapons, colonial design, and torture and prison equipment. Instead, the "evil" at the Böse Dinge exhibition refers to the rhetorical act of condemnation by Pazaurek (cf. Flagmeier 2013).

23. The strategy of inviting the audience means that taste authorities like Pazaurek have lost importance. We may still have design prizes and institutions promoting "good design," but clearly outspoken design demagogues like Pazaurek are rare. This does not, however, mean that authorities in exerting taste no longer exist; they have simply changed their rhetoric and appearance in a heterogeneous variety of locally situated authorities. In the field of interior and decorative design, magazines and digital media facilitating different kinds of connoisseurship have taken over. Curiously, across the street from the museum in Berlin, you will find a shop on Oranienstraße that is outside the reach of taste authorities and carries all different kinds of unnecessary stuff that would make Pazaurek turn in his grave.

24. Mollerup's (2019a) primary topic is the question of simplicity in Danish design, but his points are not exclusive to this context.

25. Building on the Aristotelean origin of the theory on metaphor, the vocabulary of "tenor" and "vehicle" derives from the classic canon in metaphor: for example, Richards (1936) and Black (1962). Metaphorical theories have found resonance in a design context, especially through the work on cognitive effects of metaphors by especially Lakoff and Johnson (1980); see also the work by Markussen (2010) and Markussen, Özcan, and Cila (2012). What also should be acknowledged, but seldom is in relation to design, is the possible instability of metaphors and their production of a detour of meaning, which may lead astray from the actual matter (cf. Derrida 1982). In design, metaphorical instabilities and detours would perhaps just result in poorly executed design. In this context, my aim is not to look at metaphors *per se* but to see metaphoric reference as a characteristic way for design objects to create sign value.

26. A further mode of sign reference according to Peircean semiotics is the symbol, which I will omit in this context. Knappett (2005) argues for the employment of Peircean semiotics in contrast to the language-oriented Saussurean semiotics in relation to material artifacts; in his opinion, the former can describe both the significative and pragmatic-material dimensions of meaning in the artifacts. However, there are other methods in semiotics in relation to material artifacts (cf. Vihma 2010).

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27. The mushroom as a metaphorical vehicle for a lamp is dominant in lamp design. Sometimes, however, the form of the mushroom seems more like the form of a nuclear explosion. This seems to be the case in Verner Panton's 1971 design for the *Panthella* lamp, which has a slim stem in the middle, even if mushrooms with such stems do exist.

28. In this way, I plea for acknowledging and positivizing the seemingly destructive aspect of negation. Seen from the perspective of the actual culture of images, we must attempt to make negation a productive factor in the understanding of the becoming, distribution, circulation, and perception of images. This is a way of approaching negation that stands in opposition to the 1967 Marxist work *La société du spectacle* by Guy Debord (2009). In this work, Debord employs the "spectacle" as a metaphor for the claim that all directly lived life in modern capitalist society is inverted and negatively transformed into illusionary representation. On the productive role of negation, see also Folkmann 2013, ch. 5.

29. Baudrillard's treatment of advertising and images is more than 50 years old (originally appearing in 1968), but it is still important in offering in-depth analyses of the phenomenological role of signs in advertising. "They refer to objects as to a world that is absent" (Baudrillard 2005,192), and the effect of images as creating a void is evocative while also being deceptive and frustrating. And—not the least—there is his analysis of advertising as an object for consumption in its own right, as "the most democratic of products, the only one that is 'free'—and 'free' to all" (187): free but unavoidable and with effect for how individuals understand themselves in relation to their society. On advertising as an object for consumption, see also Drügh 2015.

30. In the literature on the role and impact of advertising in modern societies, this mechanism of transference is a well-stated axiom. Ads may produce a setting of "symbolic equivalence" for the object where "known properties of the world thus come to be resident in the unknown properties of the consumer good" (McCracken 1988, 77). Hereby, "the role of advertising in modern industrial societies is to verbalize and to image the possible meanings of things" (Leiss et al. 2005, 260).

31. As lucidly demonstrated by Grace Lees-Maffei (2014b), design icons are not just "there" in the world but are made so: "Iconicity is conferred, communicated and reinforced through a process of iconization" (16).

Chapter 5

1. My perception (or claim) of designers' experience of aesthetics as illusive stems from interviews with designers, frequent participation at design practice conferences, and the literature on aesthetics in relation to design practice. Regarding the latter, the Dutch project on a Unified Model of Aesthetics (UMA) is an exception in its attempt to qualify and quantify aesthetics for designers, even if its method has been to pose

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the question of how to design for the end-purpose of pleasurable products and not how the design process has contributed to the end-product of pleasurable products.

2. Thus, I encourage readers to work through my arguments and transfer the insights on general features of design such as form, function, sign value, and experimentation to own contexts of design.

3. This last aspect of the imagination as a meeting of sensual and conceptual relates to a Kantian understanding of imagination; see chapter 1 and, for a full treatment, my book on *The Aesthetics of Imagination in Design* (Folkmann 2013). In addition, see Murphy's discussion of how imagination may operate on an intersubjective level as an "act of figuration" that, with a "power of organization," is involved in "object creation" (Murphy, Peters, and Marginson 2010, 26).

4. Nigel Cross (2006) simply labels this "design epistemology" as ways for designers to know and engage with the world as a basis for designing.

5. On the Bauhaus school of design as an inauguration into the tradition of artistic experimenting, see chapter 4.

6. Design teacher Helle Graabæk developed this concept.

7. The specific topic of Dana Cuff's (1991) study is the creation of "architecture" as a discipline and profession, but her study can serve as a paradigmatic case study on the formation of creative professions in general.

8. In Reckwitz's (2018) argument, the disposition for creating newness in objects and atmospheres was from a start bound to "modern art" (16) but has since spread to most other areas of late-modern societies; for a discussion of the "invention of creativity" and its embeddedness in society, see Reckwitz 2012.

9. Cuff (1991) gives special consideration to the role of mentors in her work on the professional socialization of architects.

10. For instance, it has been conducted in the case of Danish design practice in an exploration of dichotomies such as conformity versus individuality and idealism versus pragmatism (Jensen 2005; see also Houth 2005). Another relevant and interesting dichotomy could be affirmative/normative design doing good such as "social design" versus "asocial" or "heterodox" design challenging normative assumptions about social value in society (cf. Martin 2022, 36).

11. According to Dickie (1974), "art" is defined by the institutional powers of an "artworld" consisting of, among others, artists, galleries, and museums. In a gallery context, this institutionalization of objects as "art" could likewise by applied to design objects as "designart" or "hybrids" between art and design. On the intersection of design and art, see further the thesis by Jette Lykke Jensen (2015) on "Contemporary Hybrids between Design and Art."

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12. The paradigmatic case may be the design company IDEO, which since the 1980s has marketed itself through human-centered design methods.

13. At the same time, much contemporary design methodology is characterized by attempts to embed or integrate intuitive processes of experimentation in frameworks of rationalist procedure. Models of "fuzzy front-end innovation" or waterfall models of progressive innovation (see, e.g., Engholm 2020) all attempt to incorporate and thus instrumentalize creative-artistic experimentation.

14. For example, Bourdieu (1993, 49) often illustrates the field as a square structured by polarities horizontally, vertically, and diagonally. In this vein and with inspiration from Houth (2005), I could have suggested a model with my proposed polarities on the x-axis and the y-axis, respectively. This endeavor, mapping the field of design practices in given localized context, would be a different project than the one I am pursuing in this context.

15. My primary source for the design literature on prototypes is Louise Valentine's (2013) well-edited volume *Prototype: Design and Craft in the 21st Century*.

16. Examples of international designers moving their design signature to different product types are Philippe Starck, Marc Newson, Karim Rashid, and Ronan & Erwan Bouroullec, just to mention a few.

17. All of Manz's products are presented on her website with a highly consistent visual mediation. This testifies that she knows how to work with digital means for presenting her work, which could be a counterargument to her skepticism of the increasing use of digital tools in the design profession.

18. Ravnløkke's (2019) thesis, written in Danish, is titled "Design af strikbluser til lang levetid. Strikkede prototyper som redskab for brugerdialog i designprocessen" ("Design of knitted jumpers for longevity: Knitted prototypes as a tool for user dialogue in the design process").

19. Cf. the discussion on the concept of emotional durability and related concepts, such as "aesthetic sustainability," in chapter 2.

20. Ravnløkke's positioning (or lack hereof) in relation to "fashion" was a topic during her PhD defense at the Design School Kolding on May 28, 2019. Ravnløkke's project is delimited from questions regarding market, culture, consumers, and, hence, fashion; instead, it deals with "users" as a part of a practice-based design research setting.

21. This feeling from the inside and watching from the outside is of highly phenomenological complexity as it entails a perception of oneself from within and from without at the same time. Merleau-Ponty (1964) discusses this complexity in relation to touching oneself, where you feel the touching and being touched at the same time; as an interface medium close to the body, clothes can be touched from

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the inside as well as the outside. Visual perception may take over as the dominant perception from the outside.

22. See also the study by Riisberg and Bang (2014), also conducted at Design School Kolding.

23. On this move as a part of the ideological bias at the Design School Kolding, see Folkmann and Riisberg 2015.

24. How moral concerns can influence aesthetic judgments is discussed at length in Saito 2017. My point here is that the question of sustainability operates as a contextual feature overlaying the sensual aspect of the design.

25. I interviewed Hagensen along the process in 2020 on March 17, May 20, June 24, and August 10. Because of the COVID-19 pandemic, all interviews were conducted through digital devices, and I never had an actual interaction with the prototypes. I thank Professor Eva Brandt at the Design School Kolding for pointing to Hagensen's work and for establishing the contact.

26. Besides being one of the dominating paradigms within design methods today, codesign is well established as a common framework at the Design School Kolding. Not only Ravnløkke and Hagensen work with user input; so does my last participant, Johanne Ib, also educated at the school.

27. In brief, Esbjerg developed in the 1860s from being a fishing village to being Denmark's new main western harbor after Denmark's defeat to an association of German forces (e.g., Prussia) in the 1864 war, when the shipping harbor Altona, today part of Hamburg, came into German possession.

28. The phenomenon of communicating to the outside world through presence or placements of objects in window frames is known from several sailor or fishermen communities in Norway (cf. Salamon 1992) and in Denmark, where the placement of porcelain figures in the window would indicate whether the man of the house was at home or at the sea and the wife, accordingly, was occupied or available. At the same time, the placement of objects in the traditionally rather narrow window frames has the function of blocking the view from the outside into the house. In this way, the objects in the window frame are means of communication to the outside world while hindering a direct view into the house.

29. The appreciation of the sign for the sake of the sign itself—that is, in its metacommunicative ability to reflect its own constitution as a vehicle of meaning—is an appreciation of what Jan Mukařovský in the 1930s and later Roman Jakobson with regard to language called the "aesthetic function" or the "poetic function," respectively (see Mukařovský 1979; Jakobson 1960; see also chapter 3).

30. Knappett (2005) argues for the employment of Peircean semiotics in contrast to the language-oriented Saussurean semiotics in relation to material artefacts; in

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his opinion, the former can describe both the significative and pragmatic-material dimensions of meaning in the artefacts. However, there are other methods in semiotics in relation to material artifacts; see Vihma 2010.

31. Weather vanes referring to the wind is probably the most standard textbook example to describe the Peircean type of index by causal-temporal reference.

32. Such a translation of the meaning of the sign could in a real-life context of designing be transmitted by the medium of mood boards, where the designer conveys her impressions of the design to the client.

33. I interviewed Ib in 2020 on March 20, May 7, June 2, and August 3, during the COVID-19 pandemic. As was the case with Hagensen, all interviews were conducted through digital devices, and I never came to have actual interaction with the prototypes. Again, I thank Professor Eva Brandt at the Design School Kolding for establishing the contact.

34. Being students at an *art* school, many participants of this workshop and later workshops were biased with a habitus of being open for virtually every kind of experimental setting of performative enactment. As stated by Ib (2020b), "for some of the students, it couldn't get wild enough." Because of the pandemic situation and the subsequent lockdown of the school, Ib could not conduct all workshops as planned and had to work with different students along the process.

35. Still, the ceramic material used in Ib's experiments is touched by human hand as part of the process of "making." The own agency of the material is not so radically explored as in design researcher Flemming Tvede Hansen's (2010) experiments with the use of computer tools for digitally driven design processes with ceramic materials. By building on random algorithms, Hansen attempted to minimize human intervention even if he, being the designer, still set the scene by coding the algorithms.

36. Callon's (1999) own example is set in a context of fishing scallops with researchers speaking not only on behalf of the fishermen but also, more surprisingly, the scallops. Callon's point is that all are agents in the same network but that the scallops' interests needs to be "translated" in order to be considered as part of the "constraining network of relationships" that constitutes the "actor-network" (79).

37. On a critical note, the "co-" of "codesign" may appear simply to be an ideological construct where designers seemingly include users and other actors to participate on equal terms as them. As demonstrated by the concept "translation" (cf. Callon 1999), power is always exerted, and in the context of "codesign," the designer is often the actor deciding how the frame is set and how the input of others is being "translated." According to Callon, a process of translation is "a situation in which certain entities control others" (81).

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Chapter 6

1. How complex it can be to design a toaster, technologically, from scratch is demonstrated in Thomas Thwaites's toaster project. In this project, Thwaites (2011) attempted to bypass the long process in civilization that enables raw materials to become a toaster, being "interested in the economies of scale in modern industry, the incremental progression of science and technology, and exploring the ever-widening gulf between general knowledge and the specialisms that make the modern world possible" (15). Disassembled, toasters appear to be highly complex products composed of a large number of complex materials (one disassembled toaster consisted of 157 parts made of steel, mica, copper, nickel, and plastics), and Thwaites's search for raw material in mines for the different components soon proved to be not only difficult but impossible. The project shows that even a simple product like a toaster is impossible to design without taking a whole series of cultural prerequisites (e.g., the history of refining materials and technology) into account.

2. The high technological complexity of many contemporary products also makes them vulnerable to disturbances in the chain of production. In 2021, because of a crisis of supply, the global market witnessed a lack of microchips. Today, a car is not just mechanics but depends on computers to operate.

3. The syntagmatic and the paradigmatic are concepts deriving from Saussurean semiotics (de Saussure 1972), which seldom is applied in design, where Peircean semiotics has attracted more attention. An exception of a design-oriented analysis applying Saussurean semiotics is Alvise Mattozzi's (2010) exemplary analysis of the Juicy Salif citrus squeezer from Alessi.

4. An example is the OnStar system, implemented since 1996 by General Motors.

5. In this way, the otherwise informative introductory book on *The Internet of Things* (Greengard 2015) has a tendency to optimistically praise all the new, smart solutions that possibly can be enabled by the technology.

6. Mayer-Schönberger and Ramge (2017) call their book *Das Digital* as a statement that digital technology has changed the parameters of the economy as described in Karl Marx's *Das Kapital* (1867), laying the foundation for the understanding of how the capitalist market operates. In an optimistic, progressive tone, Mayer-Schönberger and Ramge see their mission as describing how the "market finally can unfold its full potential" (25) as framed by capitalist economy.

7. Naturally, not all economy is led by digital platforms and oriented around service. Since Russia invaded Ukraine on February 24, 2022, the world's basic dependence on natural resources became very clear, with devastating consequences. Ukraine is one of the world's central suppliers of wheat, so when the country came under attack and siege it caused a lack of basic food in several parts of the world. Then there is the complex situation with the natural gas reserves of Russia, which large parts

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of Europe were dependent on and which, to a large degree, has paid for Russia's warfare.

8. "By the early 1990s the Walkman was available in over 700 versions" (du Gay et al. 2013, 60); a fan site claims that there are "estimated to be between 300 and 500 different models of Walkman, Discman and Watchman" (https://www.walkmancentral.com/faq, accessed June 17, 2022). Whatever the number, it is quite many! A different company with many customized products is the Finnish company Nokia, which since 1982 has produced hundreds of different models of mobile phones and smartphones. The strategy of Nokia to design different phones for different uses and audiences opposes the design strategy of Apple to design only one (or few) model(s) at the time to be released once a year with the goal of setting new standards each time. Whereas Nokia has aimed to target a variety of audiences, Apple has aimed to *define* its audience as first-movers in hardware and software. To a comparison of Apple and Samsung, which also makes a case of designing many different models, see Deserti and Rizzo 2019.

9. Actually, the title of Stalder's book is *Kultur der Digitalität*, which literally translates to the "Culture of the Digital." I employ "digital culture" as a concept and as a translation—in the first case, it refers to a discourse of "digital culture" that is prevalent in Anglophone contexts, and in the latter, the singular form of "culture" and "digital" marks both translations. Stalder (2016) makes the point that he employs the singular form of "culture" in order to describe a "new cultural constellation" (11) at the same general level as the term "Gutenberg Galaxy" has been used to describe cultural and societal conditions in the age of the printed book since the middle of the fifteenth century.

10. In German: Referentialität, Geimeinschaftlichkeit, Algorithmizität.

11. The core argument of this section has been presented in Folkmann 2020 and, in an early version, in Folkmann 2015.

12. The contextual aspect of design aesthetics (i.e., how aesthetic appeal is created by actors and factors in the context) and how, accordingly, a cultural perception of digital technology is being produced calls for its own investigation beyond the scope of this chapter. On this point, Paul Atkinson (2010) has done important work on the construction of cultural perceptions of computer technology in which he considers, for example, gender-biased ads from the 1970s, where women type and men analyze data from the screen, and film settings of computer technology.

13. I thank Gesche Joost for introducing me to this formulation.

14. As a word, "Zeug" is difficult to translate. It is uncountable in the same way as "stuff," but it can also be used as a suffix to other words, designating certain groups of objects, such as "Werkzeug" (tools), "Schreibzeug" (tools for writing), or "Fahrzeug" (vehicles). I use the German word or "stuff" as a translation.

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15. Heidegger's analysis of *Zeug* is part of his seminal 1927 work *Sein und Zeit* and has been referred to several times in the literature on design (in, e.g., Boradkar 2010), as he, among other things, points out that an object like a hammer may not be noticed as such when in use for the purpose of hammering but may be noticed as an object in itself if it breaks. The hammer is, when it is in use, being ready at hand in a "Zuhandenheit," referring to and being integrated in a use-situation, and if it breaks, the constitutive reference to purpose is destroyed and the "reference itself surfaces" (Heidegger 1977, 74). Heidegger's point is that the Zuhandenheit of things may block us from grasping the being of the given thing in its "Vorhandenheit." When things break, we may see the totality that the things are a part of as a unity, and with this "unity the world shows itself" (75).

16. For this reason, New Zealand's Customs and Excise Act 2018, allowing smartphones and mobile phones to be controlled when entering the country, has been criticized for violating privacy (cf. Rahim 2018).

17. The slimness of the smartphone seems to have found its limit. The removal of the 3.5-millimeter headphone jack on many models, especially flagship models, has been debated since Motorola started the trend in 2016 on the models Moto Z and Moto Z Force Droid, because it limits the functionality of phone by making it dependent on wireless headphones. Further, the severe case of the exploding batteries of the Samsung Galaxy Note 7 in 2016 testifies that sometimes high performance and slim design are problematic in combination. Seemingly, the lithium-polymer batteries exploded because there was too little insulation between the positive and the negative part of the battery and too little space in the cabinet to accommodate this kind of battery, which expands after some time (cf. Schröter 2018). As essayist Bruno Preisendörfer (2018) laconically states about the art project iStone, an iPhone-shaped model in stone by the Swiss artist Horst Bohnet: "At least it doesn't burn" (191).

18. An example is Steve Jobs's obsession with the outer design of the first iPhone rather than in its inner hardware, considered to be a matter for the Apple engineers.

19. The credo has often been understood as the submission of form under function, but in Sullivan's conception, the point was that function and form are organically interconnected and parts of the same unit of expressing the spirit of the modern times. Sullivan's own argumentation may have been more nuanced that the credo ascribed to him suggests, but it has in its own right surely had an impact on the discourse of design.

20. For this reason, the USB hub has been curated to the *Böse Dinge* (Evil Things) exhibition at the Museum der Dinge in Berlin in 2103 under the category "strange material" (Volkers and Flagmeier 2013, 81): The seashell-shaped USB hub is being positioned as a typical piece of bad taste design because of the unnecessity of form and an unnecessary treatment of the surface by painting it as a seashell. See also chapter 4.

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21. The vocabulary of the arbitrary and the motivated derives from the semiotics of Ferdinand de Saussure (1972), where the relationship of the components of sign, signified and signifier, is arbitrary. There is no law of nature specifying what a tree should be called—for example, that a German tree must be called a "Baum." In few instances, a kind of motivated relationship exists, such as onomatopoeia (i.e., words imitating sounds)—for example, when a cat is "meowing" in English, we can almost hear the cat.

22. Although Krippendorff (2006) made efforts to internationally introduce semantics as a central term for design in the book *The Semantic Turn* and to widen the application of the concept of "meaning," product semantics seems mostly to be a German business and, even in this context, a niche phenomenon.

23. Whereas the formal function deals with the formal organization of the design object, such as the symmetry and simplicity of the Beolit 17, and the symbolic function provides information about the cultural associations of the object, such as the modernist style of the Beolit 17 and its associations with a young and urban lifestyle.

24. Because of this shift from the interface to experience, aesthetics has gained in interest in HCI research. It has attracted attention, either on behalf of the designed interfaces in questions of "style" (e.g., Buur and Stienstra 2007; Engholm 2008), "beauty" (e.g., Bollini 2017; Tractinsky 2004; Tuch et al. 2012), or "interaction aesthetics" (Xenakis and Arnellos 2013, 59), or on behalf of the user's response in "user interest, excitement and satisfying experiences" (Sutcliffe 2010, vi; Lindegaard 2007; Silvennoinen, Rousi, and Mononen, 2017). To the topic of aesthetic parameters in relation to HCI research, see Folkmann 2018b.

25. The sociologist Jean Baudrillard (2005) makes an interesting remark about the role of miniaturization as a part of the modern culture: "After the Promethean expansion of a technology striving to occupy the whole world, the entirety of space, we are now entering the era of a technology that works in the world 'in depth', so to speak" (54). Baudrillard made this observation in 1968, which predates modern, digital technology; nevertheless, the principal point is quite precise.

26. The notion of "planned obsolescence" (cf., e.g., Boradkar 2010) has gained a new dimension in the digital age. Objects of the industrial age could be planned to last for a specific (short) period of time by containing poor materials; digital products also have examples of "traditional" planned obsolescence. Moreover, smartphones may be obsolete when they require new operating systems to run better and when this operating system in fact would require a new device. Apple has been criticized because its operating systems may suddenly, after a year, run slower. Inevitably, an update to a new operating system—and a new device—would again be required.

27. Close affiliated with *Hertzian Tales* is the book *Design Noir: The Secret Life of Electronic Objects*, cowritten by Anthony Dunne and Fiona Raby (2001), which deals with experimental projects in relation to electronic objects. Because of its programmatic character, I will focus on *Hertzian Tales* (Dunne 2005).

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28. Actually, the Beolit 17 is familiar with the types of examples that Dunne explores in his book, which mainly are radio devices.

29. The tracking on Google Maps is also a matter of surveillance. When you try to find the easiest way through the traffic, this way is found by harvesting data from other users.

30. Protective covers for smartphones, which may have colors, soft materials, and mimic animals, do however attract attention and may let the consumer stop and reflect on the nature of the object. Nevertheless, these mainly function to familiarize the objects and to let them be integrated in the imitate space of consumers.

31. Unfamiliar objects may be difficult to identify for what they are. In one joke video, dated 2013, an older guy ("Grandpa") uses a tablet computer as a cutting board and puts it in the dishwasher machine (see https://www.youtube.com/watch?v=U2gQE0J00UE, accessed December 1, 2022).

Chapter 7

1. Perec (1965, 91). In English: "They lived in a strange and shimmering world, the bedazzling universe of a market culture, in prisons of plenty, in the bewitching traps of comfort and happiness." Translated by David Bellos (https://issuu.com/de_repente/docs/things__a_story_of_the_sixties__a_m, accessed June 6, 2021). The title of Perec's work, *Les choses: Une histoire des années soixante*, is translated to *Things: A Story of the Sixties*.

2. In chapter 3, the description of aestheticization was related to the role of (1) actors and institutions, (2) the expansion of design and the extension of the aesthetic, and (3) aestheticized ontology.

3. Neither Kant nor Forsey use the term "aesthetic perception." Forsey's term for the effect of aesthetic means on humans is "aesthetic experience." See also the discussion on the concept of "aesthetic experience" in chapter 4. The point is that aesthetic perception is a matter of the subject-side of the aesthetic relationship.

4. The investigation was initiated with funding from the Faculty of Humanities at the University of Southern Denmark.

5. Unfortunately, the larger empirical investigation was never realized because of a lack of external funding. Initial findings, especially in relation to the effect of mediation on the articulation of aesthetic preferences, are reported in Folkmann and Hansen 2016.

6. We worked inductively by letting empirical insights inform the later process and formulation of hypothesis. The present analysis is a later product and was not a part of the process. Due to the pragmatics of gaining information through interviews to qualify how to take interview strategies further, the group of interviewees turned

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out to be biased in age and gender. First, many participants are in their twenties, and second, the group had 12 female participants in comparison to 4 male participants. I will not speculate about differences in gendered aesthetic perceptions, but I will note that most students in our design programs at University of Southern Denmark are female, which may have caused the student participants to be almost solely female. Across gender, though, we noted a tendency among nonstudent participants who were recruited openly through social media platforms: many of them had strong opinions on design, and they probably volunteered to be able to make their opinions known.

7. Interviews lasted one to two hours and were conducted by Kristina Hansen Hadberg. All interviews were conducted in Danish.

8. To focus on aesthetics as having a special relationship to art is part of Venkatesh and Meamber's (2008) understanding of aesthetics: "We define aesthetic consumption as those aspects of sensory experiences that are made manifest in the consumption of everyday objects that are presumed to have aesthetic qualities, as well as those experiences relating to art and art-like objects and artistic events" (48). In Charters's (2006) account of aesthetics, the artistic is present but beauty is foregrounded: "Aesthetics deals with the experience of objects which provide the consumer with an element of beauty, or which are emotionally and/or spiritually moving" (239). A rather traditional understanding of aesthetics is also present in Dagalp and Hartmann's (2021) informative and synthesizing meta-study in which aesthetics deals with the "beautiful, sublime, moving, or interesting" (3). Consumer studies in aesthetics seem to be stronger in analyzing mechanisms among consumers and in the market than in challenging the core concept of "aesthetics."

9. "When we were children, everything was brown; teak and yellow walls and brown velvet furniture and that brown stuff [det der brune noget]. When I was . . . teenager, when I was a bit older, cognac-colored things were in vogue, and I bought boots and jackets in that color. I don't own a single piece of brown clothing today" (respondent #10, female, age 51).

10. Through this taste norm, I might add, respondents are typically not fond of or are not able to relate to kitsch objects, which historically became widespread when plastics became dominant as a material (cf. Bayley 2012).

11. Never underestimate the power of speaking and hereby externalizing thoughts! As far back as 1805–1806, in his treaty *Über die allmähliche Verfertigung der Gedanken beim Reden*, German author Heinrich von Kleist noted that thoughts may develop when speaking and turn into new directions. Kleist used as an example a speech by comte de Mirabeau, on July 23, 1789, in the revolutionary French Assemblée Nationale. In his speech, Mirabeau (in Kleist's rhetorical analysis) develops the thought of revolution. It did not exist before and eventually resulted in the real event of the French Revolution. (See von Kleist 1993.)

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12. In fin de siècle culture, a personality model developed that viewed everything in the world through an artlike prism; Oscar Wilde is the prototype, propagating a transformation of the world into art. Many poets in the nineteenth and twentieth centuries have shared this approach, such as Baudelaire and Mallarmé. The focus of Venkatesh and Meamber's analysis is, however, not artful individuals living a bohemian lifestyle on the verge of society, but ordinary consumers, and I do not assume they imply that consumers should be bohemians.

13. A more moderate translation could be "Better Living." But the word "bo" is an imperative: Do live better and, implicitly stated, we will teach you how to do so! In its early days, *Bo Bedre* offered practical advice for how to live better, often in accordance with a modernist taste norm; today, it is focused on lifestyle, mostly in the higher end of society, displaying high-end furniture and design "classics."

14. The transition from modern to late-modern societies is a dominant figure in much sociological theory; for instance, Giddens (1991), Bauman (2000), and Lash and Lury (2007) imply changes in notions of subject and social structure (breaking up existing structures and stratifications in a demassification); meaning (focusing on cultural value in a process of dematerialization); and time (turning the focus away from modernity's trust in societal progression into a kind of de-progressivity). In late-modern societies, to generalize crudely, things and subjects have become liquid, self-reflexive, and self-oriented.

15. Obviously, when dealing with "classics" in furniture design, we can see that they are never something given or related to essences in the objects but are always constructed in multiple ways by multiple actors, as demonstrated in detail in the context of Swedish design by Anna Wahlöö (2017). See also the informative study by Munch and Jensen (2022) on "selling time" as an asset when dealing with "classics."

16. Reckwitz's theory on the society of singularities reads as a continuation of his work on creativity, which also traces the roots of creativity in the model of arts (cf. Reckwitz 2012, 2018).

17. Remarkably, competitions in form of design prizes do not play any role for respondents in the interviews. Qualifications though media and social media influencers play central roles, but design prizes (for instance, and with relevance for the Danish context, the German Red Dot Design Award or the Danish Design Prize) are totally absent as a means of qualifying or quantifying value.

18. Cecilie Manz is also present in cases in chapter 5 and 6. It is, however, coincidental that Manz is the curator of this exhibition; my intention has not been to privilege her work in this book. When I started to look at exhibitions promoting Danish design, *Everyday Life* was the most recent one.

19. Part of this subsections was previously published in Folkmann 2018b.

20. In different constellations, Danish Craft or craft.dk, since 2014 a part of the Danish Arts Foundation, has worked on promoting Danish design through exhibitions.

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Since 1999, the exhibition *Danish Crafts Collection* has operated as a platform for promoting Danish craft and design by selecting objects by designers in the beginning of their career, and since 2008 this concept has been supplemented by *MINDCRAFT*, an exhibition of "the best of Danish craft and design" displayed at Salone del Mobile in Milan (Mindcraft 2017).

21. In addition, the corporations behind the media have been increasingly uncovered as non-tax-paying vultures of contemporary capitalism, exposing users to personalized advertising when you consider, for instance, that Facebook has access to all data about its users. These forms of media exploit the personal data of the users by turning their "perception, thinking and communication" into "commercial goods" (Schweppenhäuser 2016, 83) for advertising purposes.

22. See also chapter 3; for more on fritz-kola in the context of aestheticization, see Folkmann 2019b.

23. On these grounds, I encourage readers to conduct their own investigations at the intersection of features of objects and culturally contextualized conditions of taste and media: How does media frame aesthetic perception in, for instance, a Japanese context?

Coda

1. Foremost, however, Aicher was a practitioner of design. In his work as a design educator in Ulm, Aicher fostered a new modernist and usage/user-focused product culture in postwar Germany, which, for example, manifested itself at Braun the German consumer electronics company. Further, Aicher was successful as a graphic designer. Aicher's complete theoretical essays on design, *die welt als entwurf* (1991a) and *analog und digital* (1991b) were published in German in 1991, shortly before Aicher's sudden death in a traffic accident, and translated into English in 1994. His reflections include a wide variety of design, from modern product culture in cars and cutlery to architecture; he writes about the importance of technology, the influence of computers, the rise of cultural and architectural modernism, and the relation between the Bauhaus and Ulm schools of design. Across the spectrum of design, however, he is in search of the core of design, what design is, what it is for, and how it is connected to society and various types of ideology and philosophy.

2. Hartmut Rosa (2020, 8) thus states, "A world that is fully known, planned, and controlled, would be a dead world." His key concept for the positive quality of the world he aims at is "resonance." Regarding "wild nature," however, the World Economic Forum reports that only 2 percent to 3 percent of the "terrestrial surface" of the Earth can be considered "ecologically intact" (Burgelman 2021). Not necessarily aiming for total control in all aspects, human intervention is, directly or indirectly, everywhere.

3. As in much contemporary Anglo-American aesthetic theory, Saito identifies aesthetic responses with responses to beauty. On these grounds, she aims to reevaluate

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beauty to encompass a knowledge of the circumstances and the context of objects. This means, for instance, that the ancient Egyptian pyramids, often the object of wonder and astonishment, cannot be evaluated without taking the slavery behind the construction into consideration. Or, that windmills, which often in local communities are regarded as an eyesore, may be attached to the ethically positive notion of renewable energy. Even so, the question in my view is not how beauty can be reevaluated but instead, as discussed in chapter 4, which aesthetic categories can be appropriate for contemporary design. To the history of windmills and renewable energy in the context of design, even stating windmills to be design icons, see Fallan 2022.

4. Today, however, most nature is designed and culturalized. Measured in weight, the world consists of more human-made material, such as plastics and concrete, than living biomass (cf. Zalasiewicz and Williams 2020).

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